THE LANCET.

VOL. I.] LONDON, SATURDAY, FEBRUARY 24, 1838. [1837-38.

LECTURES
ON THE
THEORY AND PRACTICE OF MEDICINE;
NOW IN COURSE OF DELIVERY AT THE
THEATRE OF ANATOMY AND MEDICINE, WEBB-STREET, SOUTHWARK.
BY
MARSHALL HALL, M.D., F.R.S. L. & E.
&c., &c.

THE ANATOMY OF THE NERVOUS SYSTEM.—*Mr. Owen's opinions examined. Origins of the excito-motory nerves. Sketch of the true spinal system.* PATHOLOGY OF THE NERVOUS SYSTEM.—*Cerebral phenomena. Pathology of the facial nerves. Hemiplegia and paraplegia. The direct and crossed effects of cerebral disease. Localisation of cerebral diseases. Convulsive affections belong to the true spinal system. Epilepsy, chorea, &c. Diseases of the meninges. Convulsion from hæmorrhage.* THE THERAPEUTICS OF THE NERVOUS SYSTEM.—*General remarks. Sedative and exciting agents. Removal of Causes. Questions which remain to be investigated.*

GENTLEMEN:—I now proceed to treat of

II. THE ANATOMY OF THE NERVOUS SYSTEM.

208. The figures at § 22, 56, and 88, will give you distinct ideas of the general forms of the *cerebral*, *true spinal*, and *ganglionic systems*. Imagine them superposed and blended, and you will have a just idea of the entire nervous system. Any view short of this is an inadequate view of this important subject.

209. The interesting question is this. Is there a *distinct* kind of nervous fibre or element appropriate to *each* of these systems? Mr. Owen observes:—"I cannot perceive the necessity of a distinct class of excitable nervous fibres for transmitting an impression to the motive fibre through the medium of the spinal chord and brain; and of another class of nervous fibres for transmitting an impression to the motive fibre through the medium of the spinal chord alone; still less can I perceive the necessity for one class of exciting or motive fibres for transmitting the stimulus to the muscular fibre from the brain and spinal chord, and of another and distinct class for transmitting a stimulus received from the spinal chord independently of the brain." The question, however, is not whether Mr. Owen can "perceive the necessity" for these things, but whether they really do exist in Nature.

210. Two things are certain:—1. It is impossible through the medium of punctures, lacerations, &c. of the cerebrum, cerebellum, and certain nerves, to excite motion. 2. That it is impossible to puncture or lacerate the tubercula quadrigemina, the medulla oblongata, the spinal marrow, and other certain nerves, *without* exciting motion. To some, the fibres or elements of the nervous system which possess, and which do not possess, the excito-motory property, may appear the same. They may not be able to "perceive" the difference. To *me*, it seems obvious that, with each property, a certain organisation must be associated. At any rate, *physiological* properties are not less important than anatomical structures.

211. Now, if the cerebrum and the medulla oblongata possess different properties, the nerves, refferent or efferent, may do the same. And if these two properties are *blended* in the spinal marrow, they may be so in the course of certain nerves, and yet the textures be as different as that of the cerebrum and that of the true medulla spinalis. In other cases, the two kinds of fibres may exist separately.

212. This is, in my opinion, a far more *probable* view than that which supposes that "the excitable fibres are those usually termed sensitive," &c. But the real philopher will pursue his investigation in search of truth, until that truth is discovered. I have proposed the question before us for subsequent inquiry (see p. 657, § 71, of these lectures, and p. 50 of my Memoirs); and I still propose to prosecute that inquiry.

213. Meantime I will observe that there is *one* nerve which *is* excitor and motor, *without* being either sensitive or voluntary, and that is the pneumogastric at the cardia.

214. Let the physiologist pursue the track opened by M. Flourens, and let him experiment and determine what nerves and what parts of the nervous system are endowed with the excito-motory power; and vice versâ; prosecuting the inquiry in those classes of animals which nature has, as it were, left dissected to our hands. Let experiment be as a scalpel, and let physiology and anatomy be as allies. In this manner we shall detect what parts of the nervous system are simple, what are compound. We shall see that the trifacial is, in its different branches, sentient, incident-excitor, and nutrient, following Nature, and not presuming to simplify what is complicated.

215. I will now present you with a

TABLE OF THE CEREBRAL, OR SENTIENT AND VOLUNTARY SYSTEM.

I. *The Sentient Nerves*:—
1. The olfactory.
2. The optic.
3. The trifacial.
4. The acoustic.
5. The glosso-pharyngeal.
6. The posterior spinal.

II. *The Cerebrum and Cerebellum, the Centre of the System.*

III. *The Voluntary Nerves.*
1. The oculo-motory.
2. The minor portion of the trifacial, or masticatory.
3. A part of the facial.
4. The myo-glossal.
5. The anterior spinal.

This table corresponds with the plate in § 22. They are to be studied together. In pourtraying this system, I have, therefore, § 22, represented double lines,—of sensation and volition,—proceeding from the lower and upper extremity, and terminating, or originating in the cerebrum.

216. Let this sketch be compared with those at § 56 and 61, which represent the incident, downward, upward, and reflex course of the excito-motory power in the medulla oblongata and spinalis, and the broad distinction between the two becomes at once apparent.

217. It becomes obvious that, if a nerve be compounded of sentient and excitor filaments, it has, probably, two origins, one in the cerebrum, the other in the medulla. The same remark is true of the nerves compounded of voluntary and motor fibres. Is it possible to trace this structure in any part of the zoological series? What an interesting subject for the scalpel and for experiment.

218. The trifacial and spinal are decidedly compound nerves *in function*; the voluntary nerves are probably all motor too, except, *perhaps*, the levator palpebræ. Whether they be compound in *structure*, is, as I have said, *the* question.

219. I now present you with a

TABLE OF THE TRUE SPINAL, OR EXCITO-MOTORY SYSTEM.

I. *The Incident, Excitor Branches.*
A. The trifacial, arising from—
1. The eyelashes.
2. The alæ nasi.
3. The nostril.
4. The fauces.
5. The face.
B. The pneumogastric, from—
1. The pharynx.
2. The larynx.
3. The bronchia.
4. The cardia,—kidney, and liver.
C. The posterior spinal, arising from—
1. The general surface—
2. The glans penis, vel clitoridis.
3. The anus.
4. The cervix vesicæ.
5. The cervix uteri.

II. *The True Medulla Oblongata and Medulla Spinalis, the Centre of the System.*

III. *The Reflex, Motor Branches.*
A. The trochlearis } Oculi.
B. The abducens }
C. The minor portion of the fifth.
D. The facial, distributed to—
1. The orbicularis.
2. The levator alæ nasi.
E. The pneumogastric, or its accessory.
1. The pharyngeal.
2. The laryngeals.
3. The bronchial.
4. The cardiac, &c.
F. The myo-glossal.
G. The spinal, distributed to the—
1. Diaphragm, and to
2. The intercostal, and } Muscles.
3. The abdominal }
H. The sacral, distributed to—
1. The sphincters.
2. The expulsors, ejaculators, the Fallopian tubes, the uterus, &c.

220. In the sketch of the true spinal or excito-motory system given in § 56, as in the above table, the excitor nerves are are arranged on the left hand, and the motor on the right, the spinal marrow intermediately. The pneumogastric nerve is the only exception to this rule; *it* is almost throughout both excitor and motor, and is placed on the left.

221. I believe an objection has been raised against designating a nerve, known to be a sentient nerve, an excitor nerve; but the question is not one of words, but of facts. Is the trifacial a sentient nerve? If so, let it be so designated. Is it also an excitor nerve? If so, there is the same reason for designating it by this epithet. In short, it is not only sentient and excitor, but it is probably

nutrient too; and any view of the subject short of this, is distant from the truth. In the same manner the pneumogastric must be viewed, not as a mere sentient or secretory nerve, but as emphatically *the internal excito-motory nerve*.

222. I repeat that in the *anatomy* of the excito-motory system there is a rich mine to be explored. In the investigation two modes may be pursued—dissection and experiment. Sir Charles Bell applauds the former, M. Flourens the latter; but all must be agreed that these two methods should be regarded "not as rivals, but as allies."

223. It may be received as a principle, that every part of the nervous system which is endowed with the excito-motory power, belongs to this system, whether this power be exerted in the direction of the nerves, *from* or *towards* the nervous centres. We have, in a simple experiment, therefore, an an easy mode of ascertaining what part of the general nervous system belongs to that subdivision of which I am treating. It would be interesting to determine this question in reference to each part of the nervous system of the various classes of animals.

224. The next inquiry would be, What are the special motions produced by stimulating given incident nerves? The most usual effect produced, is a motion of the limbs. But, in other instances, we have acts of inspiration, of deglutition, of expulsion,—of closure in the eyelids, larynx, pharynx, and the sphincters:—interesting facts, which speak a physiological language, and assign distinct and special offices to certain excitor nerves.

225. These excitor nerves may be viewed as *guards* of the orifices and exits of the animal frame. Thus:—

I. *The Trifacial Guards*:—
1. The eye.
2. The nostril, the ear,—in the cetacea.
3. The fauces.

II. *The Pneumogastric*:—
1. The larynx, the bronchia.
2. The pharynx, the cardia.
3. The ureter, the gall-duct.

III. *The Spinal Nerves*:—
1. The rectum.
2. The bladder.
3. The vesiculæ seminales.
4. The uterus.

To each part of this series of excitor nerves, there is a corresponding set of motor nerves.

226. I must especially point out in this, what I deem the true view of the respiratory system. It consists of the *excitors* of respiration, in addition to the respiratory system of Sir Charles Bell.

System of Respiratory Nerves.

I. *The Excitors*:—
1. The trifacial.
2. The pneumogastric.
3. The spinal.

II. *The Medulla Oblongata.*

III. *The Motors.*
1. The intercostal.
2. The diaphragmatic.
3. The lower spinal, &c.

227. I need scarcely repeat that the respiratory system is only a part of the true spinal or excito-motory system.

228. In reply, finally, to the remarks of Mr. Owen, I will beg you, once more, to consider the facts detailed, § 150, p. 687, comparing Mr. Mayo's "Physiology," 4th edition, p. 303.

III. The Pathology of the Nervous System.

229. The subject which I now enter upon, will have a peculiar interest for you, preparing yourselves as you are for *practice*.

230. In order to conceive a clear idea of the pathology, we have only to imagine the physiological phenomena already noticed assuming a pathological character. Now, the force of these phenomena may be augmented, diminished, or annihilated.

231. In regard to the cerebral functions we have, in the sentient nerves, pain or insensibility; in the cerebrum itself erroneous perceptions, judgments, and volitions, or delirium; or a total deficiency of these faculties, or coma; in the motor nerves, continual voluntary actions, or paralysis.

232. We may take the face, with its sentient and motor nerves, to illustrate a part of this subject; we may have morbid sensibility in the face, and this may assume the form of *tic douloureux*; we may, on the other hand, have loss of sensibility; this may arise from disease of the opposite hemisphere, or of the fifth nerve, within or without the cranium. The former case constitutes hemiplegia of the face; the latter cases have been particularly described by Sig. Bellingeri and Sir Charles Bell. We have in these affections interesting calls upon our resources for the diagnosis.

233. In hemiplegia the loss of sensation is rarely complete, and there is usually paralysis of the muscles of the face, and the susceptibility of the nostrils to irritants is unimpaired; this was the case in a patient whom I recently examined, by the kindness of Dr. Watson, in the *Middlesex Hospital*. In the case of disease of the fifth, within the cranium, the loss of sensibility is frequently complete; the nostril has also lost its susceptibility to the impression of stimuli, and eventually the eye, not being nourished, shrinks and collapses; the power of the masticating muscles is impaired, but the face is not distorted by any *apparent* paralysis.

234. In paralysis of the face, from disease of the opposite hemisphere, the eyelid can be closed, as in this representation; in

paralysis of the facial nerve the orbicularis is paralysed, as you may observe in this. What is the rationale of this difference? The seventh, like the fifth, is a compound nerve; as the latter embraces excitor and ganglionic filaments, which are not involved in the attack of hemiplegia, so the former comprises a branch belonging to the excito-motory system, which is not affected in disease of the cerebrum. These I have not thought it necessary to designate particularly.

235. Both the fifth and the seventh pairs of nerves are, then, more complete than they are represented to be by Sir Charles Bell; the former includes excitor and nutrient nerves, with the nerve of sensation, and it has appropriate origins, distributions, and offices; of its offices sensation alone is impaired by cerebral disease, but all are annihilated by the pressure of a tumour within the cranium; the seventh comprises pure cerebral and true spinal nerves; the cerebral only is affected in hemiplegia, and the orbicularis retains its power; all are paralysed by the pressure of a tumour below the ear, and we have paralysis of the sphincter of the eyelid. This remark leads me to observe, that *ptosis* is a cerebral paralysis, whilst *lagophthalmia* is one of the true spinal system; to the latter system *strabismus* also frequently belongs.

236. It was well known to the ancients that disease in one hemisphere of the brain induces paralysis in the opposite side of the body.

237. This fact has been confirmed by modern pathologists. It has been fully ascertained that disease confined to one hemisphere of the cerebrum, or of the cerebellum, and to one side of the mesial plane in the tuber annulare, constantly affects the *opposite* side; whilst disease, confined to one of the lateral columns of the medulla oblongata and medulla spinalis, affects the *corresponding* side of the muscular system; the encephalon has a *crossed effect*, the medulla a *direct effect*.

238. It has been further ascertained that in *experiments*, lesions of the encephalon induce *paralysis only*; whilst lesions of the medulla oblongata and spinalis induce *convulsion*, or *paralysis*, according to its severity; hence it becomes an important question to determine the cause of convulsive affections in *disease* of the encephalon; to this question I shall particularly direct your attention immediately.

239. Such are the *facts* in reference to this subject. I must now briefly state to you, that formerly Saucerotte, in his Prize Memoir, presented to the *Académie Royale de Chirurgie* in 1768, and, more recently, MM. Foville and Pinel-Grandchamp, M. Serres, M. Lacrampe-Loustan, and M. Bouillaud, have attempted to show, that besides this crossed effect of the cerebrum, affections of the corpus striatum, or its *middle lobe*, induce paralysis of the *inferior* extremities, whilst similar affections of the thalamus, or its *posterior lobe*, induce paralysis of the *superior* extremities; so that if this opinion were true there would be a *doubly-crossed effect*. I use this phrase as a sort of *mnemonic* for you, if you should wish to speak of these opinions, for I fear I must call them by that name. M Lallemand and M. Andral, after an examination of an extensive series of facts, have declared that the statement is without foundation. M. Bouillaud has further attempted to show that disease, or lesion, of the *anterior lobe* of the cerebrum leads to a loss of the power of articulation; but this opinion is equally contested by the two authors whom I have just quoted.

240. I must now briefly notice an attempt to *localise* the affections of the brain, of a different kind, but equally disputed by these pathologists. MM. Delaye and Foville have stated that the gray or cortical substance is principally affected in *mania*. M. Bouchet and Cazauvieilh, whilst they agree with MM. Delaye and Foville in their view of the pathology of mania, contend that in *epilepsy* it is, on the contrary, the white or *medullary* portion of the brain which is diseased.

241. The tubercula quadrigemina alone have a crossed effect both of convulsion and paralysis.

242. M. Ollivier observes, that a hæmorrhage into the tuber annulare only paralyses the movements; M. Cruveilhier, on the contrary, asserts that such an affection destroys the sensations and the movements, but leaves the intellect uninjured. How many questions, then, still remain for future inquiry to solve.

243. I need scarcely add in this place, that in those cases in which hæmorrhage occupies an extensive space, affecting both hemispheres of the cerebrum, as in meningeal hæmorrhage at the summit, or at the base of the brain, in extensive hæmorrhage within the brain, extending from one hemisphere to the other, or into both ventricles, *general* paralysis is observed: the same event takes place in the cases in which a clot is formed in the mesial line, in the tuber annulare, the nodus encephali, as it has been termed.

244. Apoplexy and general paralysis are always serious; they are still more so when they affect the excito-motory system, inducing dysphagia, stertor, relaxed sphincters, &c.

245. Legallois, impressed with the idea that the spinal marrow was endued with the faculties of sensation and volition, experienced great difficulty in explaining the occurrence of paralysis from disease of the cerebrum. He observes:—"Even if no means be perceived of reconciling them, it would still remain true, on the one hand,

that an affection confined entirely to the brain, may take away sensation and voluntary motion from one half of the body; and, on the other hand, that sensation and voluntary motion may subsist and be kept up in a decapitated animal. However opposed these facts may appear to be, we must remember that two facts well established can never exclude one another, and the contradiction which we imagine to exist, is caused by some intermediate circumstances, some point of contact which escapes us." The facts and principles which have been detailed in this lecure enable us readily to remove this difficulty, and to account for the paralysis induced by disease of the cerebrum, on one hand, and for the movements of an anencephalous fœtus in utero, or of a decapitated animal on the other. The paralysis consists in the loss of voluntary motion; the movements of the anencephalous fœtus result from the agency of the excito-motory system. Legallois' error was that of mistaking the phenomena of the excito-motory system for sensation and voluntary motion; and his difficulty naturally arose out of this error. There is no real discrepancy between the two orders of facts to which Legallois refers.

246. But I must hasten on. I will close my remarks on this subject by stating, that however distinct the cerebral and true spinal subdivisions may be, they exert an influence upon each other which is essential to the well-being of the individual. The anencephalous fœtus, though it may be born alive, and even live for some hours, is not *viable;* it must *soon* die. Apoplexy and hydrocephalus destroy the patient by destroying the cerebral functions merely. During sleep even, although this be *chiefly* an affection of the brain, the functions of the true spinal marrow are somewhat impaired; the respiration is noisy, frequently slightly stertorous, and irregular. Yet the respiration does proceed, acts of deglutition take place, and the sphincters do their office. Still a marked distinction between the cerebral and the true spinal functions, is, that the former are partly suspended in *sleep*, and entirely in *coma*, whilst the latter are unimpaired. In sleep and in coma the eyelash is susceptible to the slightest stimulus, and the orbicularis, the sphincter of the eyelid, and the other sphincters, with the muscles of the larynx and of the respiration, do their office. This state of things cannot last long, however, in coma; because the integrity of the cerebral funtions is essential to the continuance of the true spinal and the other functions of the animal economy. Hence the fatal omen attached to stertor, choking, relaxation of the sphincters, and other morbid affections of the true spinal functions, in cases of cerebral disease already noticed.

247. On the other hand, if the excito-motory system be impaired in its functions, the acts of the cerebrum are interrupted. The volition is perfect in chorea, in stammering; but the voluntary movements, from the morbid condition of the excito-motory system, are irregular and imperfect. I have this day witnessed a remarkable fact:—a patient who had suffered a degree of loss of power of the left arm and leg, from a protracted epileptic seizure, and who could not close the hand firmly otherwise, could grasp any object placed in it, with considerable force.

248. I must not, however, extend my observations on the cerebral system, but hasten to that in reference to which I particularly wish to engage your interest. That I shall readily do this, on account of the part which I myself have taken in its elucidation, I have no doubt; but I rather wish to do so, on account of the intrinsic and practical value of the subject,

249. The *first* remark I would make is a very comprehensive one. I believe that the *whole* order of spasmodic and convulsive diseases belong to this,—the excito-motory division of the nervous system; and that they cannot be understood without a previous accurate knowledge of this system.

250. Another remark is equally important. *All* these diseases have their source in *one* of three parts of the excito-motory system: the first series have their origin in the spinal marrow itself, the axis, or centre of the system; I shall designate these cases by the epithet *centric;* the *second* series have their source in the excitor nerves, consequently at a distance from that centre; I shall denominate them the *eccentric*. A third series occurs, like the spasmodic tic of the seventh pair, in the course of the motor nerve. I will soon convince you that this distinction is not an unimportant one; the prognosis depends upon it almost entirely; the centric diseases are, for the most part, incurable; the eccentric diseases, on the contrary, as generally with some particular exceptions, admit of cure. I will briefly illustrate these positions:—you have two little patients with croup-like or other convulsions; one of these cases may arise from disease within the cranium, or spinal canal; it will most probably prove incurable; the other may arise from dentition, a cause acting upon an excitor branch of the fifth; I need scarcely add, that it will generally yield to the prompt and energetic use of the appropriate remedies.

251. A third remark is, that in *all*, or *almost all*, the orders of spasmodic diseases, the parts most immediately concerned in ingestion and egestion,—the orifices and exits of the frame,—are those principally affected. The physiology has become pathology. The *larynx* is *closed* in the convulsions of children, in epilepsy, in puerperal convulsion; it is spasmodically affected in tetanus and hydrophobia; it is partially affected in

croup-like convulsion, in hysteria, in which there is frequently loss of voice, &c. The *pharynx* is affected in some of these diseases. The *respiratory muscles* are so in all. In epilepsy we observe affections of the *sphincters*, and even of the ejaculators.

252. No disease can illustrate the pathology of the excito-motory system better than epilepsy. It is sometimes centric and incurable; frequently eccentric, arising from gastric, or intestinal irritations, and curable. It involves every part and every function, of which I have spoken under the head of the physiology. The fourth and sixth nerves are affected, and the eyes move convulsively; the tongue is protruded, the teeth are forcibly closed upon it, the mouth is variously moved, with the extrusion of bloody foam; the larynx is closed, and there are forcible convulsive efforts of the expiratory muscles, and, as I have just stated, the sphincters are sometimes relaxed, and the ejaculators occasionally expel the semen.

253. I must say a few words, in this place, respecting the important function of generation in both sexes.

254. It is plain, from the circumstances, that the act of the *συνουσια* in the male sex is irrespective of the sensation,—one of the true spinal marrow; it is an *excited* act, from an appropriate stimulus. This being wanting, the *act* of ejaculation is as impossible as that of deglutition without saliva, or other appropriate stimulus of the muscles of the pharynx.

255. Gregory, speaking of this act, observes,—"Ita ut totum genus nervosum mirum in modum convellat, musculosque *levatores ani* dictos ad contractionem citat," &c., &c., and adds, "semen in urethram effusum novum dat stimulum cui musculus *accelerator* paret, in reddenda urina voluntarii motus, in expellendo semine invisi motus, organum," &c.

256. The same elegant writer adds,—"Neque solus accelerator musculus convellitur; levis plerumque tremor aut convulsio, aliquando vero vehementissima convulsio omnium musculorum in venere observatur; hinc anhelatio, palpitatio, syncope, *epilepsia* nonnumquam, vel demum subita mors, quæ nonnullos venere occupatos, nec tale quidquam timentes abripuit."

257. I observed, in the paper already mentioned, that there is but a step, as it were, from the normal affection of the nervous, muscular, and respiratory systems, in that circumstance, to an attack of epilepsy of itself; Hippocrates is said to have observed,—*την συνουσιαν ειναι μικραν επιλημψιαν*.

258. On the other hand, there is, in epilepsy, as I have stated, frequently an action of the ejaculatares.

259. The whole of these phenomena lead us to interesting views, both of this act and of this disease. Both are, primarily, affections of the excito-motory system. A patient, mentioned by M. Brachet, perfectly paraplegic, and destitute of all sensation below the loins, becomes a father; the *συνουσια* is described as being "sans sensation, sans secousse." Its influence was *limited* by the disease.

261. With these remarks I must conjoin one or two observations respecting the connection of the uterus with the excito-motory system. Every one is aware of the effect of conception in inducing vomiting, and of the fearful attacks of convulsion which sometimes supervene at a later period of pregnancy, and during, or after, parturition. One patient, on the other hand, subject to epilepsy, lost the attacks during the whole period of pregnancy. The very act of parturition, inscrutable as it is, seems, with abortion, to be one of the excito-motory system.

261. As a final remark, I must mention the singular influence of the *passions* over these and *all* the functions of the excito-motory system. Sickness, panting, convulsions, relaxation of the sphincters; these, and a thousand other affections of this system, are induced, through the mysterious influence of disgust, fear, &c. Infantile convulsions and epilepsy are renewed by vexation, &c.

262. The condition of the larynx and of the respiratory motions, affords an important diagnosis between epilepsy and hysteria. In the former the larynx is usually closed with forcible expiratory efforts; in the latter it is open, with heaving, sighing breathing.

263. In one case of epilepsy my patient, who was musical, lost the power of singing the higher notes after each attack. It is well known how frequent loss of voice is also in hysteria. In hysteria, however, we have rarely, if ever, a bitten tongue.

261. A terrible disease of this order is tetanus. All the symptoms of tetanus sometimes arise from disease within the spine. This ought to be termed *centric* tetanus. Far more frequently the cause is seated externally, in the course of some of the excitor nerves of the system. A nerve included in a ligature, or lacerated in a wound, may prove the *eccentric* seat of tetanus. In both cases it is plain that it is the excito-motory division of the nervous system which is involved in the disease.

265. To show you how little this subject has been understood, I will adduce one fact especially. Even Mr. Swan, than whom few have dissected the nervous system with greater success, imagines that tetanus may have its seat in the ganglionic, or sympathetic system of nerves. Mr. Swan observes,—"I have been induced to inquire how the body is usually affected after accidents. From that inquiry I have been led to state,

that when a severe injury has been received the ganglia of the sympathetic nerves become irritable, and, consequently, the parts to which they distribute nerves." The irritation "may be communicated to many of the cerebral, and all the spinal, nerves, and from these to the spinal chord; thus producing tetanic spasms, spasms varying according to the part of the sympathetic nerve most affected, as well as the extent and complexity of the irritation."

266. It is difficult to conceive how the sympathetic could either be affected by the cause, or produce the symptoms of tetanus; its functions are interstitial, not obvious to our senses, seen only in their *effects*. It is plain, on the contrary, that the real seat of this disease is that portion of the nervous system which I have distinguished from the rest, and designated the excito-motory. Tetanus may be produced at will in the frog, or salamander, by applying strychnine to the skin. If the head be moved the frame is still tetanic. If any portion of the spine,—if even the tail of the salamander be separated, it exhibits all the phenomena of perfect tetanus. These cease on destroying the caudal portion of the spinal marrow, by means of a fine needle. If, in the decapitated turtle, you lay bare certain nerves, and pinch them continuously with the forceps, you immediately induce a state of tonic contraction of the muscles of all the four extremities, and of the tail. This experiment is the very *type* of tetanus, and leaves *no* doubt what particular part of the nervous system is affected in this disease.

267. I have scarcely time so say a word about hydrophobia. But consider how this disease is induced, what symptoms present themselves; what parts, what functions, are involved; and you cannot fail to fix upon the particular division of the nervous system affected in this most terrible of maladies.

268. I must hasten to conclude this lecture. Allow me to say one word respecting vomiting. This act may be excited by disease within the cranium, by irritation of the fifth in the fauces,—of the pneumogastric in the stomach, the gall-duct, the ureter,—of spinal nerves of the cervix uteri. This familiar phenomenon combines the excitor nerves and motor nerves of respiration into one system.

269. On the other hand, dentition produced strangury and tenesmus,—symptoms of calculus,—in the little boy of a friend of mine; symptoms which ceased on freely lancing the gums.

270. In one case, extreme spasmodic stricture of the sphincter ani was produced by the unsuspected presence of a calculus in the urethra. There is no more common event than retention of urine, from passing a ligature round a hæmorrhoid tumour. In *all* these various cases, an excitor nerve is irritated; the irritation is carried to the medulla oblongata, or spinalis, and reflected upon the muscle, or system of muscles, excited to spasmodic action.

271. The time does not now admit of my adducing more facts of this kind. Before I conclude, however, I must lay before you, some facts of another description.

272. First, disease of the meninges, and of the brain, induce spasmodic actions. How is this explained? I think upon the principles of irritation and counter-pressure. The first *may* act through the medium of the nerves distributed to the membranes,—as the recurrent of the fifth of Arnold. In reference to the second, I may adduce several valuable facts. In an interesting case, most anxiously watched, and accurately detailed to me by my friend, Mr. Toogood, of Bridgewater, of a little girl, aged thirteen months, the croup-like convulsion occurred repeatedly, until one day, when the bones of the cranium separated, the convulsion then ceased. In a case of spina-bifida related to me by Mr. Herbert Evans, of Hampstead, there was a croup-like convulsion whenever the little patient turned, so as to press upon the tumour. In the case of anencephalous fœtus, described by Mr. Lawrence, convulsion was produced on pressing on the medulla oblongata. In a case of meningitis given by Dr. Abercrombie, the anterior fontanelle became very prominent; pressure upon it induced convulsion. Hypertrophy of the brain affords an argument of the same kind: it induces convulsion except in the case in which the cranium grows with the encephalon. These and other facts, lead me to think that convulsion arising from cerebral disease is thus to be explained.

273. And now an interesting case presents itself. What is the rationale of convulsion from excessive hæmorrhage? It struck me that this question might be resolved by experiment. I went to a butcher, and begged to see a sheep killed. The usual mode of doing this is, first, to divide the spinal marrow, and then to open the large vessels. At my request, not only the spinal marrow, but the entire neck was divided, the head being separated from the body with the exception of the skin; the blood-vessels were then divided. I watched the effect of the flow of blood. After a certain hæmorrhage had taken place, the animal was violently convulsed. The convulsion could only be *spinal*.

274. One final word upon the pathology of the external portion of the ganglionic system. I think it probable that many of those cases in which *one* limb of an infant ceases to grow, are cases in which the disease is seated in the posterior spinal nerves leading to the part—probably at, or near, their origin. This conjecture must be confirmed by the careful post-mortem examina-

tion of such cases. It may possibly admit of being illustrated by experiment.

275. I beg to observe that I shall, in future lectures, treat of these subjects in their turn, and, as usual, in a perfectly *practical style*, from which the present lecture must be viewed, in some degree, as a deviation.

276. I must conclude this lecture by a few brief remarks upon

IV. The Therapeutics of the Nervous System.

277. Excitement in the cerebral system may be much diminished by a due attention to exclude the patient from light, from noise, from every kind of mental disturbance. To this branch of our subject belongs the whole of the *moral* treatment of the insane, as it has been termed.

278. In reference to the true spinal or excito-motory system, much more may be done.

279. Strychnine obviously excites this system; whilst the hydrocyanic acid as obviously diminishes its powers. These two remedies may, therefore, have appropriate applications. But I have seen them sadly misapplied. What do you think, for instance, of strychnine as a remedy for hydrophobia? Would you not as soon give the hydrocyanic acid in the paralysis of colica pictonum? And is it not preposterous to give the strychnine to excite *spasmodic* affections of one system, the spinal, in order to cure paralysis of another, the cerebral, in hemiplegia, for example?

280. Hydrocyanic acid is the special remedy in certain diseases of the excito-motory system; the exciting *cause* being removed in the crowing inspiration of children, and in asthma, the hydrocyanic acid affords most essential relief; the same thing is true of pertussis, and some other diseases of this class.

281. The carbonate of iron and the liquor arsenici are other remedies, the powers of which are only partially explored. They cure chorea.

282. Then we have an important remedy in electricity and galvanism. Have its powers been *appropriately* applied?

283. Another important remedy, in the class of true spinal affections, is the dashing cold water on the face or surface. This remedy tends to open the larynx in epilepsy, and to convert the violent expiratory struggles into acts of inspiration.

284. Another agent which has great influence upon the excito-motory system is change of air. This is observed in the later stages of pertussis, the croup-like convulsion, &c.

285. Another view of this subject, and a most important one, is the removal of all the *causes* of morbidly excited states of this system. In the convulsions of infants we remove the causes of irritation in the gums, the stomach, the bowels, &c.; and in the epilepsy of adults we adopt similar plans.

286. But I suspect there are many regions uncultivated, unexplored, in this field of investigation. May not counter-irritation be applied more extensively along the spine than hitherto? In a case seen by Mr. Copeland and myself, and already mentioned (§ 132, p. 686) much benefit accrued from the persevering and effectual use of a liniment, consisting of two drachms of liquor potassæ, and of liquor ammoniæ puræ, with twelve of the linimentum saponis. Might not a lotion of the hydrocyanic acid be applied with advantage in some cases of *tonic* spasm?

287. Might not the inhalation of the vapour of this powerful remedy be of service in some spasmodic affections of the respiration, &c.

288. For a further illustration of my views I must refer to the treatment of asphyxia in infants, which will be given in the succeeding lecture. I will close these remarks by observing once more that we have, in this part of the subject, much still to investigate, especially in the way of experiment.

289. I have thus conducted you through the general principles of the nervous system, and we are now prepared to take up the individual diseases of that system. But before we proceed to these, it may be well for me to recapitulate what has been done by my own investigations. I have shown you then,—

I. That the vis nervosa of Haller obeys other and different *laws* from those laid down by that eminent physiologist, and by Professor Müller.

II. That this same power is the active but *unsuspected* agent in the experiments of Redi, Whytt, Legallois, Mr. Mayo, &c.

III. That this same power has a most extensive but *unsuspected* application to *Physiology*, *Pathology* and *Therapeutics*; and

IV. That it reposes in a special and *unsuspected Anatomy*, consisting of

1. *The True Spinal Marrow*, with
2. *Incident*, *Excitor*, and
3. *Reflex*, *Motor Nerves*.

These constitute the *True Spinal Excito-Motory System*, the importance and extent of which no one yet knows. *These constitute my discovery.*

More or *less* than these I do not claim.

I find I have made a mistake in § 7, p. 649. I have there stated that Mr. Mayo was the familiar pupil of Sir Charles Bell. Mr. Mayo's intimacy with Sir Charles Bell terminated in 1815. Both Sir Charles Bell's and Mr. Mayo's inquiries were posterior to that date, and independent of each other.

As my sole objects are truth and justice, I have great pleasure in subjoining this P.S. In a "History of the Nervous System," which I am preparing for publication, I shall not fail to do strict justice to *all* parties.

ADDRESS

DELIVERED BEFORE THE

MEDICO-BOTANICAL SOCIETY OF LONDON,

Wednesday, February 14th, 1838.

BY DR. SIGMOND,

On the occasion of his taking the Chair of Professor of Materia Medica to that Institution.

The Right Honourable EARL STANHOPE, President, in the Chair.

MY LORD PRESIDENT AND GENTLEMEN,—

It has been no less a pride than a pleasure to me to have devoted for a series of years, a large portion of my time and attention to the cultivation of the sciences for which this Society was established, and to have assisted in contributing to the great progress that the materia medica is now making. You have rewarded my labours by annually electing me to fill the most responsible situation in your institution. The time has now, however, arrived when the great increase of my professional occupation, and the duty which I owe to the public to hold myself at its command, preclude the possibility of my continuing to watch over the general arrangements of this Society. Your kindness has, however, while it has relieved me from certain duties, placed me in a situation in which I can most advantageously prosecute the particular inquiries into which I have been led, and still continue those exertions which you have frequently honoured with testimonies of your approbation. The branch of science which we have, within these walls, sedulously attempted to improve was singularly disregarded in this country; it was considered a dry and uninteresting province, and was neglected for studies decidedly of great value, but which after all depended for their practical utility, and their useful application, upon a thorough knowledge of the objects of our investigation. Pathology, morbid anatomy, the inquiry into the nature and seat of disease, and surgery, have made a progress which reflects the highest honour on their cultivators; but the knowledge of the particular power of each remedial agent, of the proper mode of applying it, and the stage of the disease in which it is best administered, has scarcely gained any inquirers; yet to discover the cause of disease, to detect the nice deviations from healthy action, to discriminate one disorder from another, is but a small part of the duty of the medical man; he must be thoroughly acquainted with the means of alleviating pain, of checking the progress of morbid alteration, and retarding the approach of death. He must have at his command all the varied resources which the long experience of men of the highest intellect, have, after careful examination and investigation, placed at his disposal. He must be thoroughly and intimately acquainted with the defined powers of each instrument of his art. He must know the inherent virtues they possess, the effects they produce, and how best he can develope their action, in each individual case, which is brought before his consideration.

It does, indeed, appear somewhat unaccountable that amidst the gradual advancement of all the sciences connected with medicine, during the last century, materia medica, in combination with therapeutics, or the art of administering remedies, should have been so much neglected, for there can be no branches of study which afford more intellectual gratification than those that are embraced in this department. Whilst the student has offered to his examination subjects that enlarge the mind and gratify curiosity the most ardent, he is called upon to learn the uses of all the objects by which he is surrounded for the noblest purposes, that of alleviating the sorrows and sufferings of his fellow-beings. The wonderful laws that govern the universe, and its varied mechanism, are not investigated by him merely as philosophic truths, but as they may enable him to render life less exposed to misery, and also less precarious. Unfortunately most of the works that have been published, and even some of the valuable lectures that have been delivered have been only useful as collecting together important matter, and the volumes we possess form only books of reference, or a dry catalogue of uninteresting details, which neither attracts the attention of the student, inspires him with enthusiasm, nor cheers him on through paths which may at first appear rugged and difficult to tread. The only reason that can be assigned for our deficiency is, that either the subject has been pursued by a lover of natural history unacquainted with practical science, or by a physician whose mind bent upon the investigation of disease, has neither inclination nor time to bestow upon the instruments he has to employ. Hence the want of combination of the two sciences,—the materia medica, or knowledge of drugs, and therapeutics, or the art of administering them; and hence, while one work contains an invaluable treasure of natural history, it affords no information on medicine; while another contains a meagre description, copied from the worst authorities, it may abound with practical hints, which, if followed with care, may be of essential service in the cure of disease.

It was the original intention of this Society to have confined itself to the study of vegetable botany, as connected with medicine, but we have gradually enlarged our views, because there has been no institution in which the therapeutic agents have been

investigated, and within a few years such have been the discoveries made, that we should indeed limit our utility did we not embrace the widest field.

As the science of which you have done me the honour to elect me your Professor—the materia medica—embraces a knowledge of every object in creation, whether material or immaterial, which acts upon the human body, so that disease may be alleviated, and life protracted, I shall not hesitate from time to time, to bring before your consideration such subjects as, although they may not come within the original scope of your inquiries, have attracted the attention of the medical profession as therapeutic agents; I shall, with your permission, produce before you such new advantages as have been gained by our science; I shall examine the pretensions of new systems, and compare them with those that are already established; for, as there is no institution in this country which opens its doors for such investigations, I am persuaded you will allow me to come to you as the promoters of the welfare of your fellow-beings, and as anxious inquirers into truth.

In the more ignorant states of society certain individuals were supposed to be invested with preternatural powers: superstition, credulity, and fear lent their aid; the agents they employed were of the most extraordinary kind,—talismans, amulets, symbols, witchcraft, and astrology, were the favourite remedies of our forefathers; and a series of years elapsed before the catalogue of the materia medica of our colleges was purged of some of the most ridiculous, and some of the most disgusting materials, which supplied the place of drugs. Many of these were supposed to have properties which common sense now rejects, and which the experience of ages has proved to be worthless. In their stead we find substances possessing such extraordinary action both upon the body and upon the mind, that the uninitiated are struck with astonishment when their effects are related. Accustomed ourselves to their powers, we look upon them without the slightest incredulity; the phenomena they produce are now so familiar to us that they pass unheeded by. Yet, when they were originally discovered they were received with hesitation, sometimes with ridicule.

When the almond was first said to yield a poison of which a drop would destroy life, none believed it. When it was first told us that a leaf of henbane taken internally would produce jealousy; that a small quantity of a species of mushroom would urge a man on to murder; that opium would awaken the most delightful reveries; that iodine would plunge a person in the deepest melancholy; that nitric acid might be administered so that life might be terminated so slowly and so gradually that the hand of murder is invisible, it appeared so at variance with facts already known to us, that it required a long experience to convince us. The idea that the foxglove could retard the action of the heart; that a fungus growing on the rye should oblige the parturient womb to give up its contents; that the eighth of a grain of the wild cucumber should cleanse the intestinal canal of its contents, was scarcely at first credited. When vaccination was introduced its opponents drew caricatures in which children were pourtrayed with horns on their heads, hides on their bodies, and tails at their rumps, and ridicule was the weapon employed to depreciate the industry and the talent of the discoverer.

When, after the melancholy gloom in which for centuries Europe had been plunged, knowledge again began to diffuse around her holy rays, medicine, mingled as it was with superstition, with magic, and with astrology, was amongst the last of the sciences that was cultivated. The people were plunged in the greatest ignorance, their understandings were sealed up by the craft of a designing priesthood, and they bowed down to a debasing bigotry, which forbade their seeking after truth. They had lost all energy of mind, and whilst they had forgotten those arts and sciences which once graced the land, they enjoyed not the power of invention. The industry and the talent of their forefathers were of no avail. In the classic land of Greece still lingered some faint traces of the glories of the past, some fragments of that philosophy which had adorned her earliest annals; the few remaining possessors of this knowledge were eagerly invited by the Caliphs of Arabia, who, struck with the beauty, the richness, and the value of learning, founded colleges upon a scale of princely magnificence, from which soon emanated all the arts and all the wisdom which were again to spread through Europe.

The Medical College of Bagdad was renowned throughout the world, and at one time no less than six thousand students issued from its halls, to propagate a knowledge of disease, and to prepare those medicines which their labour had discovered. But whilst the science of medicine lingered amongst the Arabians, it lost much of that simplicity by which it was previously distinguished. Poetry and fiction were hardly separated from philosophy; the warm and ardent imaginations of the Arabians were little adapted to cool and inductive reasoning, and their figurative language quickly disguised the plain and simple truth.

It is certain their alchemy had taught them the most valuable of our preparations of mineral bodies; but these were involved in mysterious descriptions, which for a long time rendered them useless. Geber, the greatest philosopher of the age in which he

lived, believed that he could make the philosopher's stone. Scheik Reyes, the prince of physicians, commonly known to us by the name of Avicenna, professed to teach the whole art of alchemy; his directions contain a mass of knowledge, but it appears to us of less importance, because he has blended what he really knew with the history of the philosopher's stone, of the mutation of the elements, and of the elixir of life. To them, however, the science of the materia medica is deeply indebted, as well for mineral preparations as for such vegetables as opium, manna, assafœtida, senna.

The sordid alchemist, however, who hung over his crucible, watching the metallic transmutations which were to place within his grasp piles of wealth, little dreamt that his selfish eagerness was leading the way to discoveries which have diffused over the world sources of the richest enjoyment, and have directed the human mind to the exertion of energies which have placed all the works of creation at our disposal. The adept who, in his attempt to render mercury solid, and thus convert it into gold, applied heat to it, and made it rise in vapour, until it burst the solid globes of iron, and hurled the roof of the house into the air, could not foresee that his baffled labours would teach posterity that machinery might be moved and vessels propelled by mercurial vapour. Nor did the enthusiast, who united the spirit of sea-salt with mercury, to make the philosopher's stone, dream that two of the most powerful medicines, corrosive sublimate and calomel, would thus be obtained; still less that from one of these salts the knowledge of a whole branch of science would spring; for it was from the bichlorate of quicksilver that Priestley first obtained oxygen, and thus led the way to the knowledge of the principle upon which the air depends, and to an acquaintance with those gaseous bodies which have such influence upon the state of man, by one of which he ascends into the clouds; by another he illuminates his cities; and every one of the gases possesses some singular characteristics by which it is distinguished.

Amongst the subjects which have been lately much canvassed by the medical profession is "the power of producing a singular state in which occasional anasthæsia is complicated with the modification of the nervous energy to which the term ecstacy has been applied." The claims to our consideration are, that it has been found beneficial in epilepsy, in hysteria, in disordered states of the nervous system; that it is capable of tranquillising delirium, of producing sleep, and that under its action the most painful operations can be performed without producing sensation. Unfortunately these most important results come before us in the most questionable shape, for they have been, in some measure, connected with a detected imposition, which was attempted to be practised on the credulity of mankind by an individual of the name of Mesmer, under the title of animal magnetism, or mesmerism.

The new doctrine essentially differs from that which was originally brought forward, and of which I must give you a very brief narrative. That which is now the subject of my examination has been investigated by a number of highly intellectual men in France, in Italy, in Germany, and in this country, and most of these persons have arrived at the conclusion that a train of phenomena, which had escaped attention, is consequent upon certain movements of the hands at no great distance from the individual to be acted upon. The marked characteristic of this agency is a sleep of a character not thoroughly understood.

Unfortunately for the cause of truth, some individuals who claim for themselves greater knowledge of the subject than those who have pursued it in this country, assert that certain alterations take place during that sleep in the state of perception; and some have gone beyond those bounds which our present experience and our limited knowledge of the laws that govern this universe, permit us to acknowledge. To separate the truth from fiction has hence become a task of no ordinary difficulty, and the exaggerated statements of individuals would almost tend to lead us from a calm and dispassionate inquiry into their pretensions. If, however, we can gain but one step by candid examination, if we can set at rest any question which agitates the public mind, and which, by the designing and the impudent, has been made an engine of great excitement, it is our duty to persevere until we attain the first object of the labours and the study of man,—knowledge and truth. For my own part, I must say, that when such men as Andral, as Rostan, as Broussais, as Jules Cloquet, whose names are reverenced wherever science has shed her light, think this inquiry worthy their enlightened examination, I, as a humble individual, cannot feel myself justified in joining in its depreciation, until I am thoroughly convinced that it is unworthy the time and attention of those whose duty it is, for the public good, to analyse everything that has obtained the sanction of the foremost men, and to give a verdict upon it, according to the best of my judgment, and of those faculties which I possess.

When chemistry and medicine were diffused throughout Europe, they partook of the Arabian fallacies,—to discover the philosopher's stone, and the elixir of immortality were the great objects; the influence of genii, the wile of sorcerers, and the magician's skill, were called in to account for disease, and to cure it. The writings of

Paracelsus, and of Van Helmont, to whom, notwithstanding this, science is indebted, abound with these mysterious agencies, of which traces yet remain in the practice pursued even to the present hour.

At the termination of the sixteenth century there took place an extraordinary revolution in medical and chemical science, by which they became more closely united; for although Paracelsus had shown to medical men the value of chemical medicines, it was reserved for Van Helmont to reform medicine; but his taste for the Arabian mysticism made him abandon the school of Hippocrates and of Galen, whose works he had read with avidity. A curious circumstance occurred to him which disgusted him with the doctrines of the day. He happened, in consequence of picking up the glove of a young girl affected with the itch, to catch the disease. He consulted the Galenists, who recommended him a course of purgatives which debilitated him; and they accounted for his disease by asserting, that it arose from the combustion of the bile and the saline state of the phlegm. Dissatisfied with this, he turned his attention to other means of cure, and many were the useful remedies he discovered.

Amongst other singular performances by him, is one entitled "A Dissertation on the Magnetic Cure of Wounds." This is an answer to Rodolf Goclenius, who had published three works on the healing of wounds by the sympathetic ointment of Paracelsus; he attempted to prove that it acted by natural, and not by magical causes. It is almost impossible to give a faint outline of this most extraordinary work, in which he points out the distinctions between sympathy, fascination, and magnetism; but I must give you the words which have served as the foundation of the doctrine of the magnetists, and which were as much reverenced as were the Aphorisms of Hippocrates, the Canons of Avicenna, and the Aphorisms of Boerhaave by their respective followers:—"In homine sitam esse energiam quo solo nutu et phantasia sua queat agere extra se et imprimere virtutem et aliquam influentiam, deinceps per se perseverantem et agentem in objectum longissime absens." He alludes to several works to which I can have no access, for I do not find them in our National Library, from which it would appear that other authors had also a firm belief in magnetism; and that among others, Dominick Balck had learned from Paracelsus the power of cure, by magnetism, of dropsy, of gout, of jaundice, and of other diseases. He believed that allusions are made in Scriptural writ, and that the transmigration of the leprosy of Naaman was thus effected. He dwells on the ecstatic sleep of which some of the magnetists of the present day speak in such a decided manner, during which objects are visible which cannot be seen under ordinary circumstances. He gives the case of a boy, who had the most anxious desire to behold his father, who was distant many miles: in his sleep he saw him, described him, and gave proofs that he believed he was in his presence. When, however, he awoke from his slumber he had entirely forgotten all the circumstances.

This species of magnetism was originally induced by the magnet, and therefore it obtained the name and preserved it even when it was found that the same effects were produced by other causes. Many writers appear to have been struck with the phenomena they witnessed, to whom I can only allude; amongst these Andreas Tentzelius, Sebastian Wirdig, and Athanasius Kircher, they exerted themselves in the promulgation of this doctrine.

A Scotch physician, whose name is William Maxwell, published a work at Frankfort, in 1679, which is said to have attracted the attention of Mesmer, to whom we are to look as the founder of the system which for a time occupied, in a most extraordinary manner, the attention of civilised Europe.

Mesmer is supposed to have acquired his art from a Jesuit, to whom it had long been known, and he determined to practise it for the public good, and to promulgate it throughout the world.

If alchemy did not reward the adept with gold, magnetism did its teacher, for at the instance of M. Bergasse, the people of Paris, enthusiastic with the blessings of magnetism, entered into a subscription to reward Mesmer; and in the year 1738, after a few months collection, laid at his feet no less a sum than three hundred and forty thousand francs. So loud were the people in his praise, so fearful that he might be tempted by foreign offers to abandon his researches, that a pension was offered to him by M. Maurepas, the minister of the day, of twenty thousand francs yearly, on condition of his instructing pupils.

No new religion ever boasted so many new proselytes,—no quack medicine was ever more greedily swallowed. Society stood amazed at the wonders that were recounted, and that were said to be effected, by this new power. Every object in nature was declared to be capable of being magnetised; trees and houses, water and wine, were alike under its control: it was to be exercised at any distance. An individual had only to determine to produce a marvellous effect; his energy accomplished it; disease vanished before it; man was about to drink of the waters of life, and to taste the fruit of knowledge. The learned and the wise who doubted were treated with contempt, until at last they demanded an inquiry into the nature, the effects, and the causes of this marvellous art, and the city of Paris impatiently called for investigation.

In the year 1784, a commission was appointed by the king for the purpose of inquiring into this new system. It was composed of four physicians, and five members of the *Royal Academy of Sciences;* amongst these were two of the most philosophic minds of the age in which they lived; men who were devoted to science, yet were so in the habit of mingling in society, that they knew the springs that move the human mind—Lavoisier and Franklin.

M. D'Eslon, a pupil of Mesmer, undertook, before these commissioners, to prove that "an agent universally diffused, and filling all space, was the medium of a reciprocal influence between the celestial bodies, the earth, and living beings; it insinuated itself into the substance of the nerves, upon which, therefore, it had a direct operation; it was capable of being communicated from one body to another, both animate and inanimate, and that, at a considerable distance, without the assistance of any intermediate substance, and it exhibited in the human body some properties analogous to those of the loadstone, especially its two poles. This animal magnetism was capable of curing all the diseases of the nervous system, and all others indirectly; it rendered perfect the operation of medicines, and excited and directed the salutary crises of diseases, so that it placed their crises in the power of the physician. Moreover it enabled him to ascertain the state of health of each individual, and to form a correct judgment as to the origin, nature, and progress of the most complicated disorders."

The plan pursued before the commissionrs by D'Eslon, to substantiate his assertion of the power of magnetism, was to place a number of patients around a circular chest of oak; each was in contact with a piece of iron which issued from the lid of this chest, a cord passed around their bodies, kept up a communication with each other, and the thumbs of each individual were occasionally put in contact with those of his neighbour on each side—the patients were then magnetised by D'Eslon, either by his hand, which he waved about the face, or by a rod of iron, which he occasionally directed towards the seat of the complaint of the individual, always preserving the magnetic polarity. He fixed his eye steadily upon the person during the operation; sometimes he pressed his fingers upon the hypochondria and upon the abdomen. The music of a piano-forte was played during the process, which lasted some hours. The commissioners state, that nothing could be more extraordinary than the scene that was then presented; it was evident that the greater number of the patients were under some powerful agency. Some of them were tranquil, but others were affected with coughing, some with pain, some with partial heat and cold, and continued perspiration; whilst others were thrown into violent convulsions, characterised by involuntary motion of the limbs, and of the whole body; spasms of the throat, wandering motion of the eyes, frightful shrieks, immoderate laughter, langour, drowsiness, and coma presented themselves at intervals. The least unexpected sound threw them into agitation, and even if the measure of the piano-forte was changed, an influence, exhibited by convulsions, was perceptible. Of all this the commissioners were witness, and they observed these frequently repeated; but the acute minds of these men were not to be led away by these apparently singular effects, and they were brought, by repeated examination, and by submitting themselves to the action of magnetism, to arrive at the conclusion, that imagination had worked upon the nervous system and had produced the effects they witnessed.

They noticed that the state of crisis, as it was called, did not come on in less than an hour or two; that the females were more generally acted upon than the men; that no sooner was one person seized with the convulsions, than the others were similarly affected. The commissioners then underwent a precisely similar process, and once a week for two hours and a half D'Eslon had an opportunity of magnetising them. Three of them were invalids at the time, but upon them no other effect than fatigue, and, from pressure on the stomach, some uneasiness were produced. The composure, the tranquillity, and the quiet of the eight commissioners formed a most singular contrast to the agitation, the noise, and the excitement of the general magnetic party. Several similar examples of failure were exhibited; and one evening, at the house of Dr. Franklin, a number of persons were assembled, and M. D'Eslon operated upon them; it was a very curious coincidence that not a single person felt the slightest sensation, excepting some of the patients who had been in the habit of being publicly magnetised by D'Eslon. The commissioners then had recourse to M. Jumelin, another celebrated magnetist, but his patients likewise proved that imagination was more or less influenced by his art.

One of the most striking experiments was attended with similar results. Two females who had shown the greatest sensibility to magnetism, were placed in separate apartments; one of them remained with three of the commissioners, she had her eyes blindfolded, during which one of the commissioners represented M. D'Eslon, and was addressed by the others as such, and various questions put to him, which led the female to believe he was proceeding with the operation. She commenced in three minutes to feel a nervous shivering, she soon became stiff, complained of pain, and the convulsive crisis came on; during the

whole of the time not one of the commissioners moved hand or foot, but remained perfectly quiet, and nothing was done that could have had the slightest magnetic influence. The other female was in another room with the two commissioners. She was made to believe that M. D'Eslon was magnetising her, and the effects very quickly became visible; her breathing was hurried; she threw her arms about, bent her body forward, the whole body trembled, the chattering of her teeth became so loud that it was heard in another room, and so violent was she that she bit her hand so as to leave the impression of her teeth upon it. Can we, then, be surprised that mesmerism was exploded, that animal magnetism, as promulgated by the first claimants to a scientific discovery, was laughed at throughout Europe; and that its followers who had declared they had performed the most miraculous cures in Holland, Italy, Germany, and England, were stigmatised as impostors, as quacks, and as enemies to truth? It was, amidst the mighty political revolutions that soon occurred, consigned almost to oblivion. But it again has arisen from its ashes with diminished pretensions, and with more apparent claim to notice.

I must quote the reasons assigned by the *Royal Academy of Paris*, in 1826, for its investigation of this subject, because they are perfectly applicable to the scientific bodies of England. They are, first, that magnetism, considered in 1784, entirely differs in its theory, proceedings, and results, from that of modern inquirers; secondly, that it is to the honour of the French school of medicine not to be behind the German physicians in the study of magnetism; lastly, that in considering magnetism as a secret remedy, it is the duty of the Academy to study it for the sake of doing away with the secret and the dangerous monopoly of those who exercise it. The opinions held by Andral, the great pathologist whose works we translate with avidity in our own language, and read with admiration, are sufficient to induce the school of English medicine to investigate the subject, and either to place the stamp of its recognition upon it, or to consign it to merited oblivion. He has delivered three most interesting lectures upon the subject, which have appeared in THE LANCET some years since, so that they are accessible to all of you. I am anxious that you should conduct your inquiries first into the facts, and then into the explanation of the facts; that you will only take such experiments as have been performed before medical men of character, that are incontrovertibly proved; that you will unhesitatingly reject such statements that are not based upon high authority; and I cannot but think that you will not be inclined to believe in some of the assumptions of the followers of magnetism. Until some more decided cases of inexplicable vision, of divination of disease, and of the means of curing it, and of producing effects upon distant objects, be brought forward, I, for one, cannot place my belief upon the foundations that have been placed before me. That magnetism may produce some striking effects daily and hourly experience proves, I am persuaded, that it is as essentially necessary for the medical man to be aware of its influence upon disease as that of any other agent, and we must most carefully watch even the leanings of our own minds, and the prejudices and the passions which sway us before we can venture to pronounce our opinions; when they are once formed the duty we owe to our fellow-beings calls upon us, in spite of the incredulity, the ill-nature, and the ridicule which may follow it, boldly to avow them to our professional brethren. Nothing can more decidedly exhibit the unwillingness of men of real science to take up this subject than the apology that the good, the amiable, Rostan felt obliged to make in his valuable therapeutic work; he says he knows he must encounter the ridicule of many learned men for his profession of faith in this new power; his best friends, he says, will express their regret that he has turned the energies of his mind to fantasies and to illusions; his enemies will be too happy to take his investigation as an engine by which they can depreciate him, and hold him up to public laughter and contempt as an idle dreamer, a wild visionary, and a dangerous physician; but Truth is the goddess of his worship, and no vain and idle babbling can deter him from the noble prosecution of that which he believes to be worthy his attention.

Such, indeed, ought and will be the feeling of every honest mind. When the first bright visions of youth are past, the soul seems to long for reality, for the sacredness of truth;—every object in creation has charms, because it seems to inspire some new-born feeling of delight, that one is permitted, even at a humble distance, to study the wondrous mechanism of the universe. In the study of medicine, one of our most important considerations—one that should be engraven for ever upon the memory—is not to allow the mind to wander too far in the paths of imagination; not to desert the slow and calm investigation of facts for the flights of a brilliant and heated fancy, but to prefer practical knowledge to all theory. Some of our most valuable authors have indulged themselves so much in bright fantasies and in lively speculations, that they have lost the high character of philosophers, and are almost estimated as poets and as romance writers. We are dazzled with the beautiful imaginations of a Darwin, of a Beddoes, but we look at them with suspicion. Our reverence for Hoffman and

for De Haen is indeed diminished when we find they believed that which is little else than the workings of a disordered fancy.

The pretensions of the followers of Mesmer for a time prevented those who were struck with some extraordinary phenomena that offered themselves, from venturing to stem the tide of ridicule, and the whole subject appeared to have passed from the minds of men, or, if spoken of, it was met with expressions of disbelief, and in this country more especially, it was thought of only as one of the impositions practised upon the imagination, and one of the delusions which have in all ages carried away the wise as well as the uneducated. Here, indeed, we had never turned our thoughts upon the subject until the arrival of a gentleman who has been for many years devoting his attention to it.

I find in the year 1826, Mons. Dupotet practised magnetism in Paris; and in the Hermes is related a case furnished by Dr. Chapelain, in which a young lady, aged 29, affected with a diseased chest, accompanied by hæmoptysis, was magnetised by that gentleman; in eight days the cough and expectoration ceased, and health was completely restored. Thus it appears that the Baron Dupotet has for some years exercised the art, and that he has claims to our consideration from the perseverance he has manifested. I have elsewhere related how I was first led to imitate his manipulations, and I have now to lay before you the result of some observations, and, as far as I can collect, the opinions that are entertained by those who have studied animal magnetism, of its power of benefitting our fellow-creatures. It is to be remembered that the art of the present day is distinct from mesmerism, and that so far from producing so much excitement, it now claims the power of tranquillising the nervous system, and of inducing a peculiar state resembling sleep, during which occasionally, there is developed a singular train of phenomena, to which the term ecstacy has been applied. I am perfectly satisfied, both from my own experience and that of others, upon whose veracity we must all rely, that in many instances by certain passes of the hand, at a distance from the person to be acted on, all external perception by the ordinary channel, in about half an hour, ceases, and that the functions of organic life undergo some unexplained change; for in very many cases respiration is impeded, animal heat is scarcely developed, and the pulse is altered in frequency. I have related a case in which these phenomena were remarkably visible; and I find that Andral quotes one mentioned by Filazzi in his thesis before the French *Faculty of Medicine*, that much resembles it. He performed the passes on a young friend for twenty minutes, apparently without producing any effect upon him, but, at the expiration of that time, he began to yawn, his eyelids grew heavy, he uttered a laugh, and it was thought he was ridiculing the experiment, when, to the horror of the magnetiser, he observed the head of his friend fall powerless forward, his respiration rattled like a dying man, the skin of his fingers was perfectly blue and very cold; all these phenomena increased in intensity, until the utmost alarm was created, for life had appeared to have departed, and he appeared in a state of complete and terrible collapse; from this, however, he awoke in a quarter of an hour, stating that he had been in a state of complete ecstacy and delight, whilst his friend describes his feelings of horror in the strongest language.

During the sleep that is produced by magnetism, there appear to be three distinct subjects which demand consideration; first, that sensibility is diminished, so that the system is singularly dead to painful impression; secondly, that an individual magnetised forgets, upon his waking from the trance, all objects which were presented to him; and, lastly, that there is a change in the state of those organs by which, under ordinary circumstances, he is in connection with the external world. To the first of these no objection need be raised, for there are many states of the nervous system in which insensibility to external stimulus is perceptible; catalepsy and mania exhibit such facts. In a case which appears in the last number of the "Medical Gazette," from the experience of Mr. Sandys, we find a patient in a state of magnetism unawakened by the sound of a watchman's rattle, and undergoing the operation of cupping, expressing uneasiness only, rather than pain. Of all the extraordinary cases, the most remarkable is the one narrated by the French Commissioners, which, though they did not themselves see, cannot be doubted. On the 12th of April, 1829, Jules Cloquet extracted a cancer in the right breast from a lady in the magnetic slumber; the operation lasted twelve minutes, during which she did not betray the slightest sensation. She remained forty-eight hours in the state of insensibility, and, on awakening from her trance, was unconscious of what had passed. On becoming acquainted with the operation, and on seeing her children around her, she exhibited great emotion; but Dr. Chapelain, who had magnetised her, again placed her in slumber. I cannot do justice to the report of this case; but it would appear that not the least trace of sensation was witnessed during this trance.

That forgetfulness of the events that have passed should occur cannot so much surprise us, for that is found to be the case in other affections. I have personally met with instances which prove that the perception by the senses is altered, and that the individual magnetised has heard no

sound, which I have caused, when not in contact with him, but the moment I have placed myself in communication with him he has heard it; thus, if I touch a note of the piano it produces no effect, until I touch the person; he then starts, and this is the same with regard to speaking. If any part of my body is in immediate communication, an attempt to answer is generally made; sometimes replies are given; but this is not the case, however loudly I might call, if a communication be not kept up. As yet I cannot believe in mediate magnetism, for I have never seen it, nor do the authorities on which it rests carry any weight with me. Some have asserted, that on magnetising water, the person who drinks of it is thrown into ecstacy; others produce magnetic effect at a considerable distance. As for clairvoyance, where the magnetised person sees objects whilst the eyes are shut, I can find no one instance on record worthy belief; even the cases related by Andral, Rostan, and Filazzi, are, to my mind, inconclusive; indeed, the great pretensions of the lovers of magnetism have caused so much incredulity, that it will be very difficult to induce the medical profession of this country to give a trial to this extraordinary agent. As far as I have yet learnt, and it is only from the observation of others, an ecstacy is produced, during which, as has been observed in various cerebral affections, hallucinations occur, which may have given rise to different fancies, such as the seeing distant objects, the power of speaking unknown languages; but all these approximate to the delusions of the insane. Our knowledge of the phenomena attendant upon sleep is so very limited that I think we must pay more attention to all the circumstances connected with it before we come to any conclusions. From what I have observed, it strikes me that the position of the body has a very striking influence upon repose; and I very much question whether an individual can be said to be in a natural sleep unless he be in a recumbent position; I find that those who are very susceptible during the magnetic sleep, are less so if they have been placed in a horizontal position; and I hope those who may be inclined to examine the subject will satisfy themselves on this point. Nor will it surprise me to learn that many of the phenomena are explicable by the unnatural posture during the effects produced by the power to which the name of magnetism is given. Some of the stories narrated of what has occurred during sleep, are not within the range of my comprehension, though they appear to be within that of others. Were I to believe a marvellous narrative, lately published, of an aerial voyage, I think I should lay myself open to the same ridicule that did a learned bishop, who, after having read "Gulliver's Travels," examined his map very minutely for the island of Lilliput.

A magnetic clinic has been established at Berlin; some of the hospitals in France and in Germany have admitted magnetic practitioners. The commissioners appointed by the *Royal Academy of Paris*, have given it as their opinion that magnetism ought to take its place in the list of medical sciences. Some facts have been witnessed by men of character and reputation in this country. Let us not pass the subject unnoticed; if we can discover that epilepsy, mania, and cerebral affections, are cured by this agency, we shall not have laboured in vain. That individuals of extreme nervous susceptibility may derive advantage from it, even if it be the work of imagination, is most true; but I do not think that then it would deserve to be a subject of investigation.

As far as I have yet observed this power of giving repose to the organs of motion, whilst those of sense are in an unusual state, depends upon certain motions of the hands. The idea that the motion of the hand, or the gently touching the body produced singular effects has long existed. Pechlin has a dissertation entitled "Tactus Manuum Salutaris;" and Prosper Alpinus mentions that in Egypt it was common to cure dysentery in a marvellous manner, by gentle motion of the hands. Delrio published a work to which Van Helmont alludes, under the title of "Disquisitiones Magicæ." One of the questions discussed was "an solo contactu, afflatu, morbi sanari possint naturaliter." Amongst those who have pretended to cure disease by manual contact was Valentine Greatrakes, who believed he heard a voice from Heaven calling on him to cure disease by such means.

I find that I have now encroached much upon the time allotted for my lecture; I must, therefore, defer any further observations, but I shall hope to come before you shortly with some explanation of the effects, and some further facts. We may yet be enabled to account for the phenomena that have been seen, if the theory I have already advanced be insufficient, although I still believe the action upon the respiratory organs is in some measure connected with the effect, we may yet discover that some emanation from the body is produced; we know that phosphorescence is the property of some animate beings, odoriferous exhalations of others, electric power of a few, and there may yet be observed some electrical aura passing, under certain circumstances, from one living being to another, and a nervous electricity may be found amongst those wondrous phenomena which the industry and the sagacity of the medical profession have turned to the benefit of their fellow-beings, and to the increase of human happiness.

THE LANCET.

London, Saturday, February 24th, 1838.

In the present stage of the Poor-Law Inquiry, before the Medical Evidence has been commenced,* and the Returns called for by the House of Commons have been made, it would be unwise to bring forward any new plan of Medical Parochial Relief. But this is the season of preparation, and those who are concerned in the results cannot engage too earnestly in collecting evidence, or in directing attention to facts and principles which are likely to influence the ulterior decision.

The British nation has engaged, in its political capacity, to supply the sick-poor, when destitute and disabled, with medical advice, human life having been hitherto regarded in this country as a sacred thing, to be cherished even in its last embers, and in its most abject forms. Millions of the labouring population have no other resource in sickness than is furnished by "the parish," and in the present Unions, where 3000 medical officers are required, nearly 2000 are actually employed,—a number greatly exceeding in amount the number of medical officers attached to both the Army and the Navy. To place the system of parochial medical attendance on the best possible footing is therefore a problem of the greatest interest, not only to every person who has a kindly regard for the poor when prostrated by disease, but to every one who looks to the usefulness and interests of the medical profession.

The earnestness which any man, or any body of men, displays in the present struggle, may, therefore, be regarded as a touchstone of sympathy with "the greater number;" and,—tried by this test,—where "the leading members," "the heads" of the profession, have no monopoly to hold fast, or to gain, where they are, to a certain extent, disinterested, we shall observe their conduct with curiosity. The Colleges, the Halls, and the Universities have hitherto preserved a stately silence on the subject. Two or three petitions have, indeed, been presented to the Legislature, expressive of their opinions thereon; but this effort has exhausted their zeal, and has been followed by no indecorous exhibition of activity, or keen and persevering exertion, such as they have displayed on occasions when their own exclusive interests have been concerned. These corporations can see the poor sacrificed in sickness without emotion, and hear the loudest complaints of their members without inquiry. Vivacious as the Sphynx, where aught is to be devoured, they sit, when good is to be effected, immoveable as the granite statue of that Egyptian monster. The funds levied on the members of the Colleges and Halls are never employed to defend their interests, or to assert and sustain their privileges. The members of the presiding councils sit apart in London, and cut off from all vital connection with the surrounding thousands. Virtually, they are foreign bodies in the political system of medicine, and have an independent "circulation."

Occasions like the present try the spirits of individuals, and the utility of institutions. This is no time for halting, for neutrality, for inaction. All who are not with us are against us; and never was the superiority of representative councils over self-elective corporations rendered more evident. While the "governing bodies" have been quietly witnessing the unrequited toil and degradation of surgeons in general practice, from one end of the land to the other, the representative councils of the Associations have been expending time, labour, and money in seconding the exertions of the medical press, and defending the common interests

* The portion of Evidence which will be found at page 782, of the present Number of THE LANCET, was incidental to the general evidence.—ED. L.

of all. The BRITISH MEDICAL ASSOCIATION has been collecting evidence, discussing principles, and drawing up forms of returns, to elicit accurate information. The "Reports" of the "Provincial Poor-Law Committee" are very useful documents, and present such proofs of zeal and good intentions as will never emanate from the Halls and Colleges. Not an inch will the *College of Surgeons* move, not a penny will it expend of its enormous funds, in bringing forward evidence of the grievances which its members suffer under the Poor-Law Amendment Act, or in endeavouring to obtain for them redress. If that sated Vampire flap its wings, the effort is never to arouse or invigorate.

But credit must not unstintingly be awarded to the Associations; they are far from having met all the exigencies of the important crisis which is at hand. The *Provincial Medical Association* dissolved their Poor-Law Committee at the time when its labours were most imperiously demanded; in the very year when an opportunity occurred for carrying into operation at least one "great design," the means in their hands for its accomplishment were abandoned. How do the men who are so fond of "great designs" reconcile themselves to this impotent conclusion? They must be perfectly conscious that the immediate re-appointment of the Poor-Law Committee,—having the command of such power and funds as the Association might place at its disposal, to collect facts in every Union, and to lay them before Parliament,—would be infinitely more serviceable than the sinking of the subscriptions upon expensive productions, which the public will not purchase.

We have entered into this discussion partly to dissipate any delusive hopes of assistance from corporate treasuries, partly to urge existing associations to put forth their strength at this crisis, and more particularly to convince the thousands of practitioners who are scattered over the Unions, that success depends, in a great measure, on their own promptitude, exertions, and intelligence. Their hands and heads must be applied to the work, or nothing can be accomplished. None are more interested than they. If they evince lukewarmness and indifference, and be not ready to make the necessary sacrifices for their own cause, what can their most zealous friends in Parliament effect in their behalf? A miserable failure of every legislatorial exertion might ensue, and then their successful enemies would point at them, in triumph, as men who murmured, clamoured, protested against the law in the distance, but failed to evince, in the hour of trial, confidence in the justice of their demands, and did not possess the means of proving the reasonableness of their claims. Such humiliating results cannot ensue if the resources of the profession be forthwith organised and put in action. The ramifications of the *British Med. Association* do not yet extend sufficiently far for the emergencies of the present juncture. A public meeting should be forthwith summoned in every Union, and attended by all the district practitioners, a subscription being raised to meet the proper expenses. From this meeting should emanate, through the labours of some competent person, a succinct narrative of the past and present state of parochial medical attendance, including an account of the proceedings of the Guardians and the Poor-Law Commissioners, in their dealings with the sick-poor and the profession,—forming a catalogue of all the existing abuses and grievances. The chairman, or other efficient person, appointed by the meeting, would become the Medical Commissioner of the district, and (remunerated for his trouble) he might devote a considerable portion of time for the next three weeks to collect, arrange, and select the facts of the greatest weight and authenticity, which would be supplied by different individuals in the Union: he would correspond with proper parties in London, and, at the appropriate time, give evidence himself before the Poor-Law Committee, or nominate competent witnesses from his locality. H

would retain office while the medical inquiry was going on, and meet the members of the Union weekly, to relate and discuss every question of importance as it arose.

After all real grievances have been explicitly expressed, and after all abuses which have arisen out of the past and the present system, have been registered, ready to be made public, if required, the outlines of an improved and equitable arrangement, should be temperately examined, such as would secure skilful advice to the poor, protect the rate-payers from imposition (for that must not be forgotten), and afford to the parochial medical officer an indisputably fair remuneration for his labour.

The medical witnesses, besides speaking to questions in which their interests appear more immediately involved, must prepare evidence on some of the most characteristic features of the present law. They are familiar with the secrets of the poor man's home; they can distinguish false from real distress, and are the best judges of the influence which any system of parochial economy exercises on the physical condition of the people. We shall advert, briefly, to two instances by way of illustration, under the following heads:—

THE EFFECT OF LOW DIETARIES, AND CONFINEMENT IN WORKHOUSES, ON HEALTH.

When the introduction of the Poor-Law Amendment Act was agitated, the question of dietaries assumed considerable interest. The dietaries were to be reduced; and it became a desideratum to prove that spare diet would not be prejudicial to the frame. Mr. CHADWICK undertook the task, and, with a degree of ingenuity for which he has obtained some credit, set the question then at rest to his employers' satisfaction. The dietaries varied considerably in different gaols. Mr. CHADWICK divided sixty gaols into three classes of twenty each; one of "Lowest Dietaries," one of "Full Dietaries," and a third where the dietaries were "Intermediate." From a comparison of the number of persons committed, the number sick, and the number of deaths, he deduced, as a result, that the lowest dietaries were healthful, and that the full dietaries of prisons were the sources of sickness and death to considerable numbers. No one had ever suspected this, or had conjectured that a daily average of 2¼lbs. of bread, vegetables, and meat (half an ounce of the latter), with a little gruel, and water at discretion, costing 4*d.*, would produce the fatal consequences of plethora. Such, however, was the alleged fact, demonstrated in figures, with mathematical precision:—

	Daily cost.	Sick per ct.	Deaths.
20 Lowest dietaries ..	3¼*d*...	3¾..	1 in 622
20 Full dietaries.....	5¼*d*...	23½..	1 in 266

Here, only 3¾ per cent. of the prisoners fell ill, and 1 in 622 died on low diet. By raising the expense of each prisoner to 5¼d. a day, the surgeons who regulated the dietaries raised the sickness six-fold, and doubled the mortality. If a guardian desired a mitigation of the dietary, he was silenced by "tabular results." If a pauper offered the cravings of his appetite in evidence, their existence was declared to be a mistake, or an idiosyncrasy,—in the name of "Mr. CHADWICK!"

A nearer examination of the facts shows that the above results are erroneous, the data having been ingeniously collected, but inaccurately interpreted. This bears so directly on the workhouse dietaries, that we cannot let the subject pass undiscussed. Mr. CHADWICK's results are deduced from the committals, and not from the population of the prisons The prison population, from five annual enumerations of the twenty prisons, with the lowest dietaries, was 3035; and 3035 persons living five years, is nearly equivalent to 15,173 years of life. With this explanation the following tabular view will be easily understood. It embraces the five years, 1830—34:—

	Prisoners committed.	Years of Life.	Cases of Sickness.	Deaths.
20 Prisons: lowest dietaries....	164614	15173	6127	243
20 —— intermediate ditto..	63440	12398	11550	188
20 —— full dietaries.....	39717	7932	8937	137
TOTAL.....	267771	35503	26614	568

	RESULTS.			
——	Annual Deaths to a 1000 Living.	Deaths to 1000 Cases of Sickness.	Annual Cases to 1000 Living.	Mean Term of Detention.
Lowest dietaries	16	40	404	34 days
Intermediate dietaries	15	16	931	71 —
Full dietaries	15	15	1127	82 —
The three classes	16	21	750	48 —

In this view of the facts the cases of sickness appear to be most frequent where the dietaries are "full;" but on examining the tables in detail, we found that the cases of sickness have never been entered at some of the prisons; and that while every complaint has been entered at the places where the dietaries are full, only s ere diseases, sent to the infirmaries, have been entered at the gaols where the prisoners are most severely treated. At the prisons, with the full dietaries, 15 out of 1000 cases terminated fatally. In 1000 persons attacked in the prisons with the lowest dietaries, *forty* died. Strange that this fact should have been overlooked! The mortality in the third class of prisons was fifteen deaths annually to a constant population of 1000. In the prisons with the lowest dietaries, sixteen per 1000 died annually,—a result directly opposed to the deductions of Mr. CHADWICK.

It is only by a perversion of words that the term "full dietaries" has been applied to the low scale of food in any English prisons. All the dietaries are low, and the mortality of prisoners whose mean age may be taken at 20—30, is nearly double the mortality of the country population at the same age:—

Annual deaths to 1000 living; Age 20—30. London, 10; Glasgow 12; English prisoners, 16; Sweden, 8.

The mortality in London and in the prisons, is as 10 to 16. Such is the effect of the gaol dietaries and imprisonment!

Mr. CHADWICK fell into error by not adverting to the fact, that prisoners on the lowest dietaries, including those in Clerkenwell, Giltspur-street, and the metropolitan prisons, were detained only thirty-four days; while in the gaols with what he has called "full dietaries," they remain eighty-two days on an average. It would have been strange if the deaths in thirty-four days had equalled the deaths in eighty-two days. This rapid change of inmates lowers the mortality in another way. Rogues and thieves, when committed to prison, rarely, if ever, labour under any serious disease. On entering they are in health. Now, the annual rate of mortality in the first thirty-four days after they have been found to be free from serious disease, certainly does not amount to five in 1000. In the prisons with

the lowest dietaries it was sixteen. In eighty-two days the effect of *selection* ceases, to a slight extent, and a corresponding deduction must be made when comparing the annual mortality of prisons where the prisoners remain eighty-two days, with the mortality of prisons where they are detained but thirty-four days. It may be safely assumed, that the mortality of prisoners on "lowest dietaries" was higher than in the other class of prisoners, and, taking the selection from a short term of residence into account, it was three times the mortality of people out of doors at the same age. Such is the magnificent argument in favour of low dietaries and imprisonment.

The proper quantity of food for masses of men or animals is the average quantity that they eat where the supply is regular and unlimited. When subsistence is stopped, or reduced much below this standard, the well-known consequences of famine ensue; and every degree below the standard has a corresponding death. Such is the result of all the statistical facts that we have seen, —contrary to Mr. CHADWICK's deductions, but conformable enough with the experience and conduct of mankind—who only lived on the "wholesome roots of the earth," and the crystal stream," when they had no alternative; and never sighed for the age of acorn-eaters, but over tables spread with Roman luxuries, or eulogised watergruel on less than 1000*l.* per annum.

The surgeons in Unions will, however, state the results of their experience, and collect evidence tending to show the real effects of the workhouse dietaries. They know the diseases that are generated by insufficient diet; and these, if they occur, it will be their duty to report fairly and accurately. To the effects of imprisonment we shall revert at another time.

THE following example of prejudice exhibited by a coroner and a jury, we extract from an evening paper:—On Monday last an inquest was held at *St. Thomas's Hospital*, on the body of a Frenchman, named LOUIS DELAMARE, who, while preparing some acids for the process of sugar-baking, received a severe scald. The man was immediately conveyed to *St. Thomas's Hospital*, where he died on Saturday last. The Jury returned a verdict of "accidental death." On the Coroner making out the warrant for the deceased's burial, the widow objected to receive it, stating that it was her intention to deliver up the body for dissection, and thereby furnish a beneficial example to her fellow-beings. The Coroner and Jury expressed great *disgust* at such a declaration, and the former requested the beadle to see that the rites of burial were duly performed.

Can anything be more provoking, not to say disgusting, than this maudlin sensibility.

One of the greatest obstacles which has hitherto opposed and still obstructs the successful prosecution of the science of medicine, is the natural dislike which all classes of persons feel to giving up their friends or relations for the purposes of dissection. The medical man himself feels as great a dislike to the employment of examining the dead body of his fellow man, as the relations of the deceased can experience distress or disgust at the idea of his mortal remains being submitted to what they have been accustomed to consider as a degrading and unholy destination. The feelings of the medical man, on the one hand, and of the friends of the dissected, on the other, must, however, both give way to imperious necessity. Without natural and morbid anatomy we can have no medicine, and without medicine people are not content to live. The only question, then, is, how are we to render the process of dissection of the dead body as little hurtful to the feelings of surviving friends as possible. Evidently by removing from the minds of ignorant and uneducated people the idea that the body is degraded by undergoing the process of dissection; and this can only be done by wealthy or otherwise distinguished individuals showing, from time to time, a readi-

ness to permit the same process to take place in the persons of their friends, or on their own bodies, after death.

So strongly was the late Professor of Anatomy at the *University of Dublin* impressed with the expediency of the educated showing an example to the uneducated in this matter, that by the express provisions of his will, he left his body for dissection; and his example has been followed by a large number of enlightened individuals, amongst whom are to be found several members of the Established Church. Yet when Madame DELAMARE expressed a desire of rendering the body of her husband useful to her fellow-creatures, instead of committing it to the earth to become the food of worms, rats, or other loathsome vermin, the Coroner, forsooth, and his twelve luminaries from Tooley-street, expressed their *disgust* at an action which was too noble a one to fall within the sphere of their comprehension.

DIGEST OF THE

MEDICAL EVIDENCE

DELIVERED BEFORE THE

POOR-LAW COMMITTEE OF THE HOUSE OF COMMONS.

IN 1838.

E. GULSON, Esq., an Assistant Poor-Law Commissioner, under examination, February 14th, 1838.

1037. Mr. SLANEY. If there be able-bodied persons who have families, and they apply upon the ground of their *families*, in that case out-door relief is forbidden?—Yes, because the Poor-Law Amendment Act declares that all relief to a family under 16 years of age, is relief to the able-bodied man.

1038. Suppose a case in which there is illness in the family of an able-bodied labourer, then relief may be given?—In my district relief is given under those circumstances.

1039. Mr. WAKLEY. So that, in fact, the rule is in no way adhered to, that relief is withheld from the able-bodied?—The words of the rule are these, "That after a certain day all relief to the able-bodied shall be in the workhouse, save and except accident and sickness."

1043. Mr. MILES. Do you mean to say that it is given in all cases?—No; the board would give it only in extreme cases. I think that the poor are much better dealt with by the board of guardians, a representative body, under the new law, than they were by the overseer under the old law.

1045. Mr. WAKLEY. In a medical point of view?—Not so much in a medical point of view as with respect to the sick having wine and things that the medical man considers necessary.

1046. Mr. SLANEY. Both under the old and the new law, supposing a pauper is ill, or any of his family, is it in the discretion of the board of guardians to give them out-door relief as it formerly was?—I do not think it is; but the 52nd clause of the Poor-Law Amendment Act enables them to make exceptions, reporting them to the Commissioners, and they avail themselves of it in extreme cases of illness, and, so far as my experience goes, the Commissioners never have objected to it.

1047. The guardians examine into the case, if they find that he is too poor to pay for medical aid, would they then give him relief?—They would, but very probably only upon loan, the most legitimate way of doing it, though even that is in violation of the strict letter of the Commissioners' rules.

1053. Mr. WAKLEY. You stated that the poor persons are better off under the existing medical arrangement than they were before this law was passed?—I think so. A poor person being ill now receives proper medical treatment, and there was security for that under the old law, but very extraordinary instances have come under my knowledge where they had no such thing; for instance, in parts of Nottinghamshire and Yorkshire it occurs repeatedly upon the parish books, that the overseers doctored the poor themselves; and there stands these entries upon the parish books, "A box of Morison's pills for A. B." "A box of Morison's pills for C. D." Another item is "Black beer and gin," though I do not understand the use of that in medicine, and other items have been given to poor persons.

1054. But you cannot say that the poor themselves did not ask for Morison's pills?—No.

1055. CHAIRMAN. Would you think it desirable, if the poor desired quack medicines, that that desire should be gratified at the public expense?—Decidedly not.

1056. Mr. MILES. In parishes where those nostrums were given, was not a regular surgeon employed?—Not constantly; there was a surgeon employed who sent in his bill, and instead of sending the poor man to him, and having his bill in at the end of the year, they adopted the shorter mode of giving Morison's pills.

1057. Mr. WAKLEY. You are quite aware

that a love of quackery is not confined to the poor?—I am.

1058. Did you form the Lincoln Union?—I did.

1059. Of what number of parishes does it consist?—Eighty-six; but there are a great number of them which do not contain above 800 acres each, and 40 or 60 inhabitants. The whole population of the union is 30,230, and its extreme length 20 miles. Its extreme breadth 16 miles, or 17.

1062. About 380 square miles?—It would, if a square, but it is a circle.

1064. When did you form that union?—Nov. 28th, 1836.

1067. How many medical practitioners were then appointed in the union?—Three.

1068. Did they not advertise for a medical officer?—Yes.

1069. Do you recollect that one person was appointed for the whole union?—He was not; Mr. Wrangham and Mr. Gunning, from the first, had a certain portion.

1070. Was not a memorial presented, complaining of the appointment of a single practitioner to the union?—Yes, from the medical men themselves.

1071. Notwithstanding that complaint, was not the appointment of that one person continued?—On forming the union I found that the average amount paid for the whole of the 86 parishes for medical relief, was about £300 a year, which appeared to me under the new system to be a fair amount, so I recommended the guardians, rather than put the matter up to tender, to give £300, and divide it into districts. Some of the guardians would not give £300, and it was decided by a considerable majority that advertisements should be issued for tenders, and the amount of those tenders, the lowest of them, varied from £450 to £700,—£300 hitherto having been paid, including all extra charges, for a great deal of it was not salary. The tenders having been so very high, it came out at the board of guardians that all the medical men of that district had met, and combined; and the guardians immediately, by my advice, resolved not to accept any of them. They then resolved to give a certain sum for the whole union, and I advised £300; but the guardians said, "No, we think that too much; this is a measure of *economy*, and the parish having been attended for £300, under the old plan, it ought to be attended for less, and we will give £250." I induced them to offer £270. The advertisements were issued; I attended the board. The medical men were, many of them, in a room adjoining in an inn. The outsides of the tenders showed that they were *foreign* tenders, (if I may so term them); so we tried all that we could with one or two medical men, as representatives of the others, to induce them to accept £300, and told them that I would use my best influence to induce the guardians, though they had resolved to give only £270, to give £300 to a *resident* medical man, rather than open the foreign tenders; but the medical men said, "No, we will not take £300, that will be coming down too much;" but, half an hour after the medical men had a consultation amongst themselves, and came in and said that they would accept £320; but the board of gnardians threw the matter up, and the foreign tenders were immediately opened, and a gentleman named Sherriff, who came there certainly with such testimonials as I never saw before,—a man who had been lecturer and in practice in Edinburgh, and who had received rewards from medical societies for discoveries, offered to attend the whole union for £200 instead of £270 offered by the guardians. He agreed to bring a regularly qualified assistant with him, and to visit each parish twice a week, whether he was wanted or not; to fix upon places at which he might be found at certain hours throughout the week, he and his assistant. I at once tried to get the guardians to give away the other £70 to other medical men on the outsides of the district, in order to limit the district within as narrow a compass as possible. However, they would not give the *whole* £70, but they did give a very considerable portion of it to Mr. Gunning and Mr. Wrangham, who took the two outsides.

1074. What number have you in the union whom the medical practitioner has to attend?—Mr. Sherriff told me the last time that I saw him, that, except in the workhouse, he never had more than 11 paupers upon his books during the last year.

1075. Did he ask you to reduce the salary of £200?—No.

1077. Was Mr. Sherriff a stranger to you?—Entirely so.

1078. Was he a stranger to the board of guardians?—Entirely so.

1080. Is Mr. Sherriff a Scotchman?—He is.

1081. Of what College?—I do not know.

1085. Then, in fact, a stranger was appointed; a person utterly unacquainted with the habits and condition of the poor in the neighbourhood, and utterly unacquainted with the locality, because there happened to be a difference between the guardians and the resident practitioners on the sum of £20?—The medical men first made tenders, the lowest of which was £150, and that circumstance, and the knowledge of their combination, created some feeling of asperity, and then it came to a much nearer point than it would have done but for the mode adopted by the medical men, and so the board offered only £270.

1091. Do not you think that the poor labour under a great disadvantage by having an entire stranger acting as a medical man among them?—We were placed in such difficult circumstances that we did by far the best thing that could be done. To

show the anxiety of the guardians to do everything which could contribute to the comfort of the poor in that respect, I may state that the time has arrived to make arrangements for the ensuing year, and we have still further lessened Mr. Sherriff's district, two of the gentlemen who before refused any part of the union having now consented to take a portion.

1092. What do you now pay?—The guardians have given the *whole* £270.

1095. Do you think that the conduct of the guardians displayed in this instance shows that they were the best representatives of the interests of the poor?—I do. No board ever adopted a plan more anxiously.

1096. You think that it was a proof of kindness that they should prefer a stranger, giving him £200 a year, they being ready to give £270, when there were 12 practitioners in the district ready to attend the poor for £320?—I deny that they were prepared to give them £320, or £270, a year; we had many other offers for a portion of the union, and but for that they never would have let Mr. Sherriff have the whole of it.

1097. They took Mr. Sherriff because his terms were so low?—And because they thought he was a fit and proper person.

1098. Was it a combination of the medical men?—Yes.

1099. And a combination of the guardians?—Yes.

1100. One had the law on their side and the other had nothing but regard for their own interests?—I think they were not exactly on the same footing.

1101. Mr. STANEY. Were not the guardians protecting the rate-payers?—Decidedly, and they would not have been justified in adopting any other course.

1102. Do you not think that the doctors were quite rightly served when they entered into a combination to get more than a decent payment?—I think so.

1103. CHAIRMAN. How long has Mr. Sherriff had this union?—Twelve months are just expired.

1107. Have you heard of any complaints of his neglect or mismanagement of the poor?—I devoted some time to ascertain how this matter went on, and I have been among the poor, and have inquired of clergymen, and I state most distinctly that Mr. Sherriff has, as far as I can learn, given the greatest satisfaction.

1108. Has Mr. Sherriff obtained by his professional reputation much private practice in the neighbourhood?—He has obtained a considerable practice.

1109. Mr. ESTCOURT. Where does he live now?—In the city of Lincoln, which contains a population of 10,000.

PETITION AGAINST THE POOR-LAW MEDICAL ARRANGEMENTS.

THE subjoined Petition to the House of Commons, from medical practitioners resident in the County of Kent, was last week forwarded to Mr. WAKLEY, for presentation to the House.

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled,

The Petition of the undersigned Medical Practitioners in the Eastern Division of the County of Kent,—showeth,

That your petitioners, being legally qualified practitioners in medicine and surgery, beg leave to approach your honourable House with the respectful but firm language of remonstrance against the assumption of the Poor-Law Commissioners, as contained in their second "Annual Report," namely, "That the complaints of the medical profession (against the present system of medical arrangements under their orders) are without foundation," inasmuch as

That in the division of Unions into Districts, the arrangements, in many instances, are so arbitrary as to entail upon the sick-poor great loss of time and prolonged suffering, from the period necessarily elapsing before medical relief can be supplied:

That a much smaller number of practitioners is now engaged in parochial attendance than was formerly so engaged:

That the residence of the medical officer is frequently from six to nine miles distant from the pauper's abode:

That medical attendance might, in many instances, be procured three or four miles nearer, and in some cases on the spot:

That the difficulty of obtaining orders for medical relief, and the incapability of the medical officer's complying with the conditions of his contract, have subjected the sick-poor to prolonged suffering, and, it is alleged, in some cases, to loss of life:

That your petitioners believe that many of the assertions, respecting medical attendance on paupers, contained in the second "Annual Report" of the Poor-Law Commissioners, are erroneous:

That your petitioners are prepared with evidence to substantiate the foregoing allegations before your honourable House:

And your petitioners, as in duty bound, will ever pray.

F. H. Sankey, Wingham
William Jameson, ditto
John Thornton, Canterbury
Cornelius H. Browne, ditto
W. H. Renwick, ditto
Frederick F. Giraud, Faversham
John F. Chittenden, ditto
James Church, Greenstreet

Charles Browning, Sittingbourne
John Grayling, ditto
William Castle, ditto
William Whetford, Ashford
David Price, Margate
Francis Dalton, ditto
Wm. Oliver Chalk, ditto
John Neame, ditto
G. H. Hoffman, ditto
Wm. H. O. Sankey, ditto
G. S. Snowden, Ramsgate
James Green, ditto
George Snowden, ditto
John Rose, ditto
James Webster, ditto
George Soulby, Ash near Sandwich
Charles Hovell, Canterbury
Amelius Sicard, Bridge, ditto
H. W. Carter, M.D., ditto
Thomas Andrews, M.D., ditto
John Sladden, Ash near Sandwich
Henry Wright, Faversham
George Walker, Sheerness
James F. Hancorn, ditto
Jos. Bassan, ditto
Charles Cordeaux, M.D., Ashford
R. Chisholm, M.D., Canterbury
Thomas Hunt, Herne Bay
Thomas Ridout, Herne
George G. Pemberton, Herne Bay
Joshua Waddington, Margate
Samuel Potter, ditto
Jos. Canham, M.D., Ramsgate
A. Courtney, ditto
David Plenderluke, ditto
James Daniel, ditto
John Walter, Dover.

PETITION RESPECTING DRUGGISTS.

THE following Petition, signed by medical gentlemen, was last week forwarded to Mr. WAKLEY, from Bradford, for presentation to the House of Commons. The document was laidbefore the House on Wednesday last, February 21.

To the Honourable the Commons of the United Kingdom, &c.

The Petition of the Medical Practitioners residing in the Borough of Bradford, in the County of York, and its vicinity,—humbly showeth,

That the great and injurious extent to which the practice of prescribing and dispensing medicines is pursued by druggists, as well as the mischiefs, too frequently irremediable, which are produced by the rash and injurious practice of bone-setters, and other persons pretending to possess a knowledge of medicine and surgery, to the imminent danger of the public, is an evil which has long been notorious to the profession, and imperatively demands the interference of the Legislature for the enactment of some regulations for the better protection of the public health:

That since druggists are constantly, and must, almost of necessity, be much engaged in compounding medicines, your petitioners are of opinion that, for the security of the public, every druggist should be compelled to undergo an examination, conducted by some constituted authority, as to his knowledge of chemistry and the nature and property of drugs, before he is permitted to exercise his trade:

We your petitioners, therefore, humbly pray, that your honourable House will be pleased, in its wisdom, to take these subjects into its serious consideration, and devise such measures as to your honourable House may seem best adapted to suppress the evil complained of, and thereby protect the interests of the profession, and of the public at large.

J. Outhwaite, M.D.
W. Mactush, M.D.
J. Illingworth
T. Beaumont
C. Cooper
W. Sharp
G. Semple
R. Caton, M.D.
H. Illingworth
B. Anningson
E. Casson
J. W. Roberts
T. Booth
W. B. Addison
W. Farrar, M.D.
T. Mackley
T. Falcon
H. P. Finucane
J. B. Greenwood
J. H. Ramsbotham
M. S. Overton
W. Cryer, M.D.
T. Nutchell
John Steel
Robt. Kirby
Wm. Ellis
J. H. Carfrae
J. F. Hemingway
A. B. Sewell.

MALIGNANT HYDROSIS.

To the Editor of THE LANCET.

SIR:—The following serious case which has just occurred in my practice, is one of a kind that is so rarely heard of, that I am induced to request you to do me the favour to publish it. Dr. Blundell, in his valuable lectures, very accurately describes this formidable disease, in which the profuse sweating is the most prominent symptom. Indeed, to use the Doctor's own words, my patient appeared "as if she had taken a vehement poison, or had been assailed with malignant cholera." I am, Sir, your obedient servant,

A MEDICAL PRACTITIONER.*

London, Feb. 12, 1838.

I delivered Mrs. H——, at noon on Sunday, of a still-born child, her third, and had the satisfaction of finding her doing well on my visit in the evening, and again on the following day, no flooding, or any bad symptom occurring during the thirty-six

* The author has authenticated his communication, privately, expressing a reason, which we do not think proper to set aside, for not publishing his name with the case.—ED. L.

hours following delivery. On Tuesday morning, at nine o'clock, I was requested to see my patient as early as possible in the day. I immediately visited her, and was informed by the nurse that her mistress had passed a very restless night. I found her complaining principally of restlessness; there was slight tenderness around the umbilicus; the tongue was slightly coated; the pulse 100 beats in the minute; the skin very moist; the urine had been freely secreted and voided; the lochia plentiful and not offensive, no secretion of milk; the bowels had not been moved. I ordered twelve leeches to the abdomen, to be followed by hot linseed-meal poultices, and three grains of calomel, with one of opium, every three hours; half an ounce of castor-oil to be given every second hour until the bowels should be moved.

At two o'clock she was relieved of the tenderness which had existed five hours previously; countenance looking better; she was jocular indeed; the perspiration was, however, much more profuse, and the pulse had risen to 120; she expressed herself as feeling very comfortable, the perspiration only annoying her; no sickness; she partook freely of gruel; ordered her to continue the pills and oil, and desired the nurse to acquaint me with the progress of the case at six o'clock. At that hour the nurse came to my house, and stated her mistress felt herself better, but the bed-clothes were saturated with perspiration. At eight o'clock I visited, and to my utter dismay found my patient moribund, the pulse countless, dreadful anxiety depicted in the countenance, cold extremities, most profuse cold perspiration, the whole of the bedding saturated therewith; abdomen tympanitic, the bowels had not been moved; she was perfectly sensible, and aware her end was approaching. Stimuli were freely administered, but to no purpose; she sank within an hour, speaking in a calm tone to the last.

TUMOUR IN THE AXILLA GIVING ISSUE TO MILK.

To the Editor of THE LANCET.

SIR:—The following case may be interesting to the readers of THE LANCET. I am, Sir, your obedient servant,

WM. H. MOORE.

Woodbridge, Feb. 15, 1838.

Eliza Snell, a healthy-looking woman, aged 23, in October last, being in the fifth month of pregnancy with her second child, observed a tumour in the right axilla, as large as a walnut, which gave her no pain, nor sensation of tenderness on pressure. As it did not produce any inconvenience she took no further notice of it until her admission into the poor-house of the Woodbridge Union, where she was placed for delivery; and in January last she showed it to me. It had not enlarged since her first perceiving it. I found it moveable, not very hard, free from heat, pain, and tenderness, and ordered it to be poulticed. This was done for eight days, but the poultices seemed to create pain, without either softening or diminishing it. She was delivered early in the present month, and to-day my attention was again called to it by the nurse, who stated that there had been a discharge of *milk* from it. On examination I saw upon its surface eight or ten papillæ, with a minute pore at the apex of each, and an inflamed areola around its base. On pressing the tumour a white fluid issued in five distinct streams, from as many of the papillæ. These were checked on removing the pressure, but could be made to jet forth to a distance of seven or eight inches on resuming it. I collected nearly a teaspoonful of the fluid, which had just the colour, consistence, and sweetish taste of milk. There is a similar tumour in the axilla of the other side, with papillæ also, but I could force no milk from them; this had never been poulticed. There is nothing remarkable in the woman. The breasts are very abundantly supplied with milk.

HYDRIODATE OF IRON IN DISCHARGES FROM THE NOSE.

To the Editor of THE LANCET.

SIR:—Having seen in your valuable Journal of the 10th, amongst the *University College Hospital* reports, a case of discharge from the nose cured with the hydriodate of potash, by Dr. Elliotson, it gives me much satisfaction to send you a brief statement of a similar case successfully treated by the same remedy. I am, Sir, your obedient servant,

GEORGE FAYRER, M.R.C.S.

Barking, Feb. 13, 1838.

June 21, 1836, a little girl, two years old, was brought to me by her mother, who said the child had from her birth been affected with difficulty of breathing, which sometimes in the night almost amounted to strangulation, deglutition at times also much impeded, and latterly alteration in the voice. She states that a fortnight before a thick puriform secretion was discharged from both nostrils, which continued without intermission. After clearing the bowels with mercurial purgatives, I ordered a scruple of hydriodate of potash, in four ounces of water, gradually increased to two scruples, a portion of which to be injected up the nostrils three times a day; also a mixture containing sixteen grains of the hydriodate in two ounces of camphor mixture, two tea-

spoonfuls to be taken three times a day; which injection and mixture she continued till the beginning of August, when she became quite well, and has never had any return.

BRITISH MEDICAL ASSOCIATION.

Exeter Hall, February 13th.

Dr. WEBSTER in the Chair.

THE following new members were admitted:—

Thomas Lloyd, Esq., New Basinghall-street, London.
W. E. Cass, Esq., Yorkshire.
W. Beloe Rix, Esq., Matchin, Essex.

The PRESIDENT stated, that a paper had been received from Mr. Watts, of Frampton-on-Severn; and some copies of an interesting address of Dr. Wilmot, the President of the Stroud Branch Association. He then read the anti-quackery petition of the Leeds Society, and the following letter, drawn up at the request of the Council:—

To the Gentlemen of the Leeds Medical Society.

Dulwich, Feb. 10th, 1838.

Gentlemen:—

At the last meeting of the Council of the *British Medical Association*, held on the 28th ult., a member brought under notice "The Petition of the Legally-authorised Practitioners of Medicine in Leeds," a copy of which was read to the Council. After some discussion, it was resolved,—"That the President be requested to communicate with the Leeds medical practitioners, on the important subject of their petition." In compliance with that resolution, I respectfully take the liberty of addressing you, and I regret that various circumstances have prevented my doing so before.

The Council of the *British Medical Association* fully coincide with you, as to the nature and fearful extent of the evils set forth in your petition, the subject having at various times engaged their attention, and even recently a Committee of the Council has been appointed to take into consideration the best means of suppressing quackery and illegal practice.

These evils, however, form only *part* of a numerous train which affect the profession at large, and the Council doubt the propriety of applying to the Legislature for any *partial* redress of grievances, without, at the same time, calling attention to many others that exist.

Three or four years since, on the presentation to Parliament of petitions from the *University* and *Royal College of Surgeons*, of Edinburgh, praying that their graduates and licentiates should not be subjected to examination at *Apothecaries' Hall* in London, because they had already been fully tested as to their knowledge of materia medica and pharmacy, an interesting discussion took place, and there seemed every disposition to grant the prayer of the petitions; but the bill founded on them was thrown out, on the plea, that medical education and the laws affecting the medical corporations and the profession generally, required attentive inquiry and revision. Out of these proceedings arose the appointment of the Committee of the House on Medical Education, &c., and though hitherto, from unforseen circumstances, no legislative enactment has followed the inquiry, (indeed no report has yet been made to the House), still much good has been done, public attention has been excited, and there is reason to believe that several medical reforms have in consequence already taken place, and many others are in contemplation, towards perfecting which the profession ought to turn their zealous attention.

When the Government or Parliament shall again consider medical affairs, it will be very important that the *whole question* should be fully gone into; so that a measure shall be proposed likely to prove an efficient remedy for the many grievances which now unhappily exist, and among which none are so prominent as quackery. The *British Medical Association* consider that the establishment of a "National Faculty of Medicine" would prove the great and effective remedy for these evils, by uniting into one body the conflicting three branches of the profession. This Faculty should have the power of electing its own rulers, who would thus be *responsible* for their proceedings, and should be clothed with power to make such laws and regulations as they might find necessary, subject to the approval of their constituents.

There should be a registration of all legally qualified medical men; and some such summary mode of punishing illegal practitioners as that proposed in your petition would be highly proper and necessary; but this power ought not to be placed in the hands of any of the present Medical Corporations, far less of the *Apothecaries' Company*.

I am firmly convinced, that until the degrading name and title of "*apothecary*" be entirely removed from those who *practise* medicine, the general practitioners will not attain that respectable and elevated footing in public estimation which members of an enlightened profession are entitled to. The "apothecary" will always be considered as *a tradesman*, and the licence of the trading *Apothecaries' Company*, the stamp of trade, as long as it flows from such a source; while his education, as now enforced, entitles him to rank with any physician or surgeon in the kingdom. Why, then, should he labour under the disadvantage of such a name?

Let there be one National Faculty of Medicine, and one title only, or at most two,—either the Doctor in Medicine (as comprehending the whole science), or it might be divided, as in France, into two classes,—Dr. in Medicine and Dr. in Surgery; but let there be no *practising* title below this; let the man who possesses such a title practise any branch of medicine, or in any way that may suit his own conscience or the public wants,—either as a general or consulting practitioner. Let him, for the sake of accuracy, &c., dispense medicine to *his own* patients, if he think proper; but he ought not to be allowed to *sell* medicines, or to dispense them to the patients of others, as that would be interfering with the province of the tradesman,—the chemist and druggist, or (if the name be retained in its legitimate and restricted sense) the apothecary. Let the latter class, the drug-vender and dispenser, under whatever name, be examined as to his knowledge of materia medica and pharmacy, and licensed to prepare and sell medicines, and to dispense the prescriptions of those practitioners who might not wish to do so themselves; let them also be registered, and let your proposed summary mode of punishment be applied to any one who is not registered, or who, being registered, should presume to practise or prescribe.

If the present *Apothecaries' Company* be tolerated longer as an examining body, let them examine and license the chemist and druggist-apothecary. Should the Worshipful Company be allowed to retain their present despotic powers, not only over those who are *merely* to pass their own Hall, but over all surgeons and graduates who may wish to become general practitioners, and if, further, they are to have (as you propose) additional power summarily to punish, not only chemists, druggists, and quacks, but all regularly-educated practitioners who do not possess their licence, then I am persuaded that a "heavier blow and greater discouragement," could not be inflicted on our profession. You would then be *perpetuating* a trading body, and adding to those already too extensive powers which the letter, not the spirit of the Act of 1815, unjustly placed in their hands, and which the Company have generally exercised in the letter and not the spirit, by prosecuting the regularly-educated and well-informed surgeon and the graduate in medicine!—*not* the quack and the prescribing chemist.

Allow me to point out to you, that the *prayer* of your petition to Parliament is at variance with its *allegations*. You state, first, that individuals are practising, &c. "without having undergone *any preparatory education*, or examination by any *legally-constituted authority*." Second, "That, in consequence of *their ignorant* administration of remedies, very serious injury and death have been caused, &c." You then pray, "as the ONLY means of remedying the above evils, and protecting the public from the danger of *ignorant and empirical practice*, that a clause be added to the Apothecaries' Act, to empower magistrates to summon before them ANY PARTY *charged with illegally prescribing* or practising *any branch* of medicine in England and Wales; and if in the event of such party failing to produce the licence of the *Apothecaries' Society* of London, to inflict a penalty, &c." Now, as this clause is worded, it appears to me, that it goes even far beyond the most questionable of the powers of the *Apothecaries' Company*, and will include all those who are illegally prescribing and practising as physicians and surgeons, with whom the Company can have nothing to do; and yet the remedy, and the *only remedy*, is to be the production of their licence! You, then, "further pray, that this clause shall affect all graduates in medicine who act as general practitioners, and all druggists who prescribe medicine." Without noticing the classification of druggists and doctors, or learned men (in fact, teachers, as the word implies), I would beg you to contrast this with the allegations contained in the 1st and 2nd clauses, that serious injury and death has occurred from the "*ignorant* administration of remedies" by individuals who have not "undergone any *preparatory education* or examination by any legally-constituted authority." Can this be said of the graduates in medicine, or of the members of the *Royal College of Surgeons?* Are they ignorant and unfit to practise any branch of medicine? Or, have they not been examined by any legally-constituted authority? Will not this look like praying for a selfish and useless monopoly, and have the appearance of a very illiberal proceeding, and of confounding and degradingly mixing up the innocent and the learned with the guilty and ignorant?

May I venture to suggest to you, Gentlemen, the propriety of reconsidering your petition, and of amending its prayer. Instead of asking for another clause to perpetuate the obnoxious powers and practices of this Corporation, I do sincerely hope that you will pray for the establishment of a "National Faculty of Medicine," the governing body or senate of which shall be elected *by*, and consequently be responsible *to*, the profession. You would thus strike at the root of the evils which we all feel so much, and be more likely to obtain the object you have in view. I trust you will pardon the liberty I have taken in thus writing so freely; but I believe I am conveying to you the sentiments of the great body of medical reformers in this metropolis; and I am convinced that we are all animated by the same laudable desire, that of seeing our much-injured profession res-

cued from its present degraded condition, and rendered more useful to the public, and more respectable among ourselves. I am persuaded, that union and co-operation will effect much in procuring the reforms we so much need; while, if we act individually, or in small bodies, we small be apt to entertain conflicting and heterogeneous opinions, and shall lose much of that moral and useful power which we ought to possess with Parliament and the public.

In conclusion, I cannot help giving it as my humble opinion, that if the prayer of your petitions were granted, it would only very partially remove our grievances, and probably defer their general consideration for years to come. I have the honour to remain, Gentlemen, your faithful and obedient servant,

(Signed) GEO. WEBSTER.

Mr. DAVIS (the Hon. Solicitor), read the draft of a petition on the subject of the Imprisonment for Debt Bill, pending in the House of Lords. The Committee had waited on the Lord Chancellor, Lord Abinger, and received satisfactory communications from other noble Lords. Lord Abinger would not only support the prayer of the petition of the Association, but would also present it.

Mr. EALES moved that the petition be adopted, signed, and presented to the House of Lords. This was carried; and, after some discussion, it was determined that the Chairman should sign the petition on behalf of the Association.

Mr. EALES moved, and Mr. DAVIDSON seconded the motion,—That the Treasurer give an account of the money in his hands, the amount belonging to the Benevolent Fund, and the number of members by the next meeting.

Four clauses of the report of the Poor-Law Amendment Committee were read and passed.

ROYAL COLLEGE OF SURGEONS.

HUNTERIAN ORATION, 1838.

JOHN HUNTER'S GEOLOGICAL VIEWS.

THE theatre of this Institution was occupied, on St. Valentine's day, with members assembled to hear an oratorical effusion from Mr. BENJAMIN TRAVERS.

The orator, in spotless kids, delivered his compilation in a very low and indistinct tone. It comprised a meagre history of surgery, original in no single fact or view. It is, indeed, scarcely credible that a body of scientific men should be thus summoned together, to be told that Aristotle knew something of natural history, that Herophilus and Erasistratus were permitted to dissect at Alexandria by Ptolemy; that there was once such a period as "the dark ages;" that the Romish clergy first contributed to the revival of medicine by translating some of the Alexandrian manuscripts which had escaped the fury of the Ottomans, and publishing the translations as original works; that such men existed as Galen, Vesalius, Silvius Talcopius, Ambrose Paré, Fabricius, Harvey, Petit, &c.; that such rival bodies existed as Chirurgi togati, and the Barber-surgeons. Yet of such ancient materials was the Hunterian oration for the year 1838 composed! But poor as was the subject matter, the style was worse. Perfectly tame in spirit, its poverty was made ludicrous by a constant effort at inflated but ill-sustained metaphors.

Mr. Travers made a brief allusion to the death of Mr. H. Earle, and failing in an attempt to portray the *character* of Hunter, he stated that Hunter had anticipated the theories of the *geologists* of the present day, in a paper published in the "Phil. Trans." for 1794. As a curiosity we present our readers with an extract from that paper:—

"The bones of animals under similar circumstances, although in different parts of the globe, one would naturally suppose to consist chiefly of those of one class, or order, in every place, one principle acting in all places. In Gibraltar they are mostly of the ruminating tribe, of the hare kind, and of birds; yet there are some of a small dog or fox, and likewise shells. Those in Dalmatia are chiefly of the ruminating kind; but those from Germany are generally carnivorous. From these facts we should be inclined to suppose that their accumulation did not arise from any instinctive mode of living, as the same mode could not suit both carnivorous and herbivorous animals.

"In considering animals respecting their situation upon the globe, there are many which are peculiar to particular climates, and others that are less confined, as herrings, mackarel, and salmon; others, again, which probably move over the whole extent of the sea, as the shark, porpoise, and whale tribe; whilst many shell-fish must be confined to one spot. If the sea had not shifted its situation more than once, and was to leave the land in a very short time, then we could determine what the climate had formerly been, by the extraneous fossils of the stationary animals, for those only would be mixed with those of passage; but if the sea moves from one place to another slowly, then the remains of animals of different climates may be mixed, by those of one climate moving over those of another, dying, and being fossilised; but this, I am afraid, cannot be made out. By the fossils we may, however, have some idea how the bones of the land animals fossilised, may be disposed with respect to those of the sea.

"If the sea should have occupied any space that never had been dry land prior to the sea's being there, the extraneous fossils

can only be those of sea animals; but each part will have its particular kind of those that are stationary, mixed with a few of the amphibia, and of sea birds, in those parts that were the skirts of the sea. I shall suppose that when the sea left this place, it moved over land where both vegetable and land animals had existed, the bones of which will be fossilised like those of the sea animals; and if the sea continued long here, which there is reason to believe, then those mixed extraneous fossils will be covered with those of sea animals. Now if the sea should again move and abandon this situation, then we should find the land and sea fossils above mentioned disposed in this order; and as we begin to discover extraneous fossils in a contrary direction to the order of their formation, we shall first find a stratum of those animals peculiar to the sea, which were the last formed, and under it one of vegetable and land animals, which were there before they were covered by the sea, and among them those of the sea, and under this the common earth. Those peculiar to the sea will be in depth in proportion to the time of the sea's residence, and other circumstances, as currents, tides, &c.

"From a succession of such shiftings of the situation of the sea, we may have a stratum of marine extraneous fossils, one of earth, mixed probably with vegetables and bones of land animals; a stratum of terrestrial extraneous fossils, then one of marine productions; but from the sea carrying its inhabitants along with it, wherever there are those of land animals there will also be a mixture of marine ones; and from the sea remaining commonly for thousands of years nearly in the same situation, we have marine fossils unmixed with any others."

Mr. Travers, of whom no news has been heard in the surgical world for many years before the present occasion, retired from the theatre, not very well pleased at his performance, and he will not, we suppose, be again thought of until it once more falls to his lot to deliver another Hunterian oration.

WESTMINSTER HOSPITAL.

LITHOTOMY, BY MR. GUTHRIE.—NEWLY DESIGNED STAFF.—DANGER OF ITS USE IN THE LATERAL SECTION.

FEBRUARY 13th, 1838. A large assemblage of medical practitioners and pupils took place in the operation theatre of this Institution. The attraction was an expected operation for stone, by Mr. Guthrie. The performance had been put off several times, but it having been seriously announced that the operation had been postponed to this day, "positively for the last time," a general expectation prevailed that no farther disappointment would be occasioned to the patient and the pupils.

William Wenham, a healthy-looking boy, about nine years of age, was placed on the "Cheselden table," and being restrained in the proper manner, an attempt was made to introduce a staff recently invented by Mr. Guthrie. This instrument was of a peculiar construction, and was designed by the surgeon to obviate some inconveniences incidental to the ordinary staff. On this occasion, however, whether in consequence of the too great calibre of the instrument, or of its peculiar angular form, the operator did not succeed in passing it into the bladder, and the operation was, consequently, again deferred till Saturday, the 17th instant.

As a compensation to the visitors and others who had assembled in the hope of witnessing a display of surgical dexterity, the operator exhibited and described the new staff which he had invented:—

"It is a well-known fact, Gentlemen," said he, "that young practitioners in lithotomy, in their anxiety to reach the staff, are continually led to cut down on its greatest curve; and thus on introducing the bistouri caché, they are much embarrassed to find that they are at some distance behind the groove, and cannot, consequently, without difficulty, get their instrument into the bladder. In order to obviate this cause of embarrassment, I have contrived the instrument I now exhibit to you. You observe that its figure is, apparently, very irregular, but this irregularity is not without a purpose. You perceive that at some inches from the handle, the staff deviates from the right line, and forms a gentle curve backwards; at a particular point it makes rather an abrupt turn forwards, and becomes perfectly straight for about two inches of its length. It is now exactly at a right angle with the straight part of the handle. The instrument terminates in a beak which makes a sudden turn upwards. The straight portion last described, is grooved as far as the point, where the groove is obstructed, and along this line, the scalpel, bistouri caché, or gorget, may be directed into the bladder. The great advantage of this instrument, is, that it makes a great projection in the perineum, just at the point where the knife ought to penetrate the urethra."

In this description, the instrument is supposed, by the speaker, to be in the urethra of the patient, and to have the same aspect as the surgeon. The terms backwards, forwards, and upwards, thus become perfectly intelligible to the reader. Mr. Guthrie said that he had used an instrument of this description in performing the operation on an adult. He also said, that he had, on the preceding day, passed this identical instrument into the child's bladder, although it now refused to receive it. Being anxious, however, not to deprive the child of a single chance of recovery, he would rather postpone the operation ten times than employ

any unnecessary force in passing the instrument. He would, therefore, have a staff made upon this pattern, but of a diminished calibre, and on the ensuing Saturday, the gentlemen present would have an opportunity of judging of its merits.

17th February, 1838. William Wenham, the boy introduced to the reader in the observations printed above, and written three days ago, was placed on the operating table, about one o'clock, P.M., in the presence of a large assembly of professional men. The newly invented staff was introduced without difficulty, the patient having his legs extended, a fact proving that the difficulty experienced on Tuesday was occasioned by the tension produced in the perineum, through the flexion of the lower limbs, upon the abdomen. When the boy was tied, Mr. Guthrie made the usual cuts in the perineum, but rather lower than usual, and having reached, as he conceived, the groove of the staff, pushed forward the same knife, apparently along the groove, until its progress was arrested by the cul de sac termination of the groove, at the point of the staff. The operator, as if aware he had not yet arrived in the bladder, impelled forward simultaneously the staff and the knife, but ineffectually. He then took the bistouri caché and pushed it forward to the stop in the groove, and drew it back, making an incision at the usual angle. No urine flowed from the wound, and the bladder was not opened. The bistouri was again introduced, and brought out, without making any new division of parts, the blade describing exactly the same track as before; the bladder still remained intact. The operator now carried a scalpel into the wound, and enlarged the incision upwards, and again carried it on to the end of the groove without penetrating into the bladder, and, on examination, the staff was found between the bladder and the rectum, resting against the prostate of the child, which is very small. It was now evident that the modified staff was too short, unless brought up close to the pubes, and Mr. Guthrie tried to carry it fairly into the bladder, but it would not enter, the point catching by the side of the prostate, and raising the bladder upon it. Mr. Guthrie now sent for an ordinary staff, and having requested Mr. White to examine the parts and see if any error had been committed, he introduced it easily into the bladder, felt the stone, and immediately carried the scalpel into the bladder, when some urine flowed. The internal membrane of the rectum had several times protruded more largely than is usually seen, and at this moment the last portion which came down, looked like small intestine of a lighter colour than the dark-red lower part of the bowel. This Mr. Guthrie returned with the rest, and requested Mr. White to prevent its prolapse whilst he carried the bistouri caché into the bladder, with which he felt the stone, withdrew the staff, and enlarged the opening in the bladder, slightly drawing it out in the same direction as heretofore. A stone, the size of a large filbert, was immediately removed, a second small one followed, but a third, although readily caught, was too large to be extracted easily. Mr. Guthrie let go his hold, introduced his finger into the rectum, and tried to turn it, but nothing was apparently gained. He then took a pair of dressing-forceps, but they would not hold; he then resumed the forceps first used, and after a very slow and gradual dilatation a square flat stone was extracted.

Mr. Guthrie stated, after the boy had been removed, that the staff was too short, and that his miscalculation of the depth of the perineum had caused all the delay, except in the extraction of the stone; that the rectum nor any other part had been cut that ought not to have been cut.

The boy has not had a bad symptom since the operation; and on the evening of Wednesday, Feb. 20th, Mr. Guthrie said he considered all danger to be over, except from unhealthy suppuration between the bladder and the rectum.

CÆSAREAN OPERATION
PERFORMED WITH SUCCESS.

By J. G. Ackens.

We have already published several cases in which this formidable operation has been performed with success; the following is the most recent example which we find in medical literature:—

Therese Rutzerfield, 44 years of age, had arrived at the age of 39 without having suffered under any severe malady. She had been married fourteen years, and gave birth to six children; besides which she has had three miscarriages, at five or six months, immediately before her last pregnancy.

In 1832 this patient, then 39 years of age, experienced, for the first time, pains in the limbs, and all the symptoms of rachitism were developed. These continued to progress until the moment at which M. Ackens was called to visit the patient, on the 19th July, 1835. The labour pains had commenced on the 17th, and the membranes had given way in a few hours, but the labour made no further progress. On examination, the tuberosities of the ischium were found to be so close to one another, as nearly to prevent the introduction of two fingers. The transverse diameter of the pelvis did not exceed two inches and a half; on the posterior part of the sacrum was found an exostosis of the size of a hen's egg. The woman said that she had been unable to walk for the last three years, and the husband declared that

for a long time intercourse with his wife had been rendered extremely difficult and imperfect, by the deformity of the pelvis. The woman's strength was much exhausted, and she has vomited frequently; the pulse was small, at 90. Having obtained the patient's consent to an operation, the author performed the Cæsarean section, in the ordinary manner, through the linea alba; the lower extremities and body of the infant were easily extracted, but the head and neck were firmly retained by the uterus. This rendered it necessary to enlarge the wound for their extraction, which was then readily completed. It was necessary to suspend the operation several times, on account of repeated vomiting, and a syncope, which lasted two minutes. The author has omitted to mention whether or no the intestines protruded under these unfavourable circumstances.

The external wound was united by three sutures, the lower part being left open, to give issue to the blood and other fluids. The dressings, which merely consisted of compresses and lint, were retained by a common bandage. On the third and fourth days the sutures were removed, and replaced by strips of sticking-plaster. Rest, and the strictest abstinence from food, were enjoined; for the first three days the patient took nothing but some cold water; she was then allowed some whites of egg, beat up with water, and, subsequently, small quantities of chicken broth. On the sixth day the patient was in the most favourable state, and on the thirtieth day after the performance of the operation, the wound was completely cicatrised.

No secretion of milk took place from the mammæ, and the child, who appeared healthy and full-grown, was confided to the care of a nurse. It continued well for three weeks, but then fell ill and died. The mother was perfectly well at the lapse of five weeks from the date of the operation; the catamenia appeared at the end of four months. The patient has not become pregnant since; the rachitism has not made much progress; the pelvis, however, appears to have become a little smaller.—*Journ. des Con. Med. Chirurg.* Feb. 1838.

CASE OF EXCISION OF THE SPLEEN.

By J. Chapman, *Esq.*

The subject of this case was a stout and healthy man, of about thirty years of age, who was gored by a buffalo, in the Morung Forest, which produced a horizontal wound, of about two inches in length, through which the spleen protruded, and remained in that state for six days, when the patient, to seek medical relief, rode into the station, a distance of fourteen koss, and put himself under Dr. M'Donell's care. A ligature was, in the first instance, applied, with the view of interrupting the circulation, and thereby removing the mass; but, on further consideration, he determined to excise the protruded viscus, which being done, and ligatures applied to two bleeding vessels, with simple dressing, and rest in the horizontal posture, the case rapidly recovered.

It is now two months since the operation was performed, and the man as yet enjoys his usual health.—*Trans. of Med. and Phys. Society of Calcutta*, Vol. viii., Part 1.

There are few, if any cases, of complete excision of the spleen on record. It would be highly interesting to follow up the history of the above case, and endeavour to trace the effects of the loss of the spleen on the economy of the patient.

Absence of the Lung.—On examining the body of a child six weeks of age, affected with cyanosis, and who died of cerebral congestion, Dr. Hein found a complete absence of the right lung; only a rudiment of the right bronchus existed; the right pulmonary artery and vein was also absent; the septum of the ventricles imperfect; the aorta arising from both ventricles; the foramen ovale and ductus arteriosus open.

ST. BARTHOLOMEW'S HOSPITAL.

As we had anticipated, Mr. Stanley has succeeded Mr. Earle, and Mr. Wormald Mr. Stanley, in the situations of surgeon and assistant-surgeon to *St. Bartholomew's Hospital.*

MR CRAMPTON.

It is reported that Mr. Crampton, the Surgeon-General for Ireland, is about to be raised to the rank of Baronet. There is no man whose professional rank and attainments more justly entitle him to such a distinction.

TO CORRESPONDENTS.

Hibernicus should apply to the registrar of the Apothecaries' Company for the information which he desires.

Had Mr. *James Lindlay* appended his address to his letter we should have given him our advice upon the points to which he alludes.

Letters and communications have been received from *Mr. Newport; Dr. F. Morvan; Observer;* and *Mr. H. J. Gore.*

Want of space compels us to defer the insertion of several communications until the next Number.